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CONSUMERS' Guide

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AGRICULTURAL ECONOMICS
DEPARTMENT OF AGRICULTURE

Back of Your Pound of Butter

CONSUMERS' Guide

Issued every two weeks by the Consumers' Counsel, Agricultural Adjustment Administration, Department of Agriculture, Washington, D. C.

Vol. IV, No. 1 March 8, 1937

WHILE movements for better wages have been hitting front pages in newspapers, consumer demands for facts have been making the headlines in trade papers. Alert leaders in business are sensing the merchandising importance of these demands. The *Bulletin* of the National Retail Dry Goods Association devotes a whole section of its convention (February) issue to "Consumer Relations" and reports the speeches made to the convention by the president of the General Federation of Women's Clubs, the Consumers' Counsel of the Agricultural Adjustment Administration, the chief of the Division of Textiles and Clothing of the U. S. Bureau of Home Economics, the chairman of the Committee on Social Science Education of the American Association of University Women, the assistant in Consumer Education of the American Home Economics Association. . .

"The consumer of 1937 is interested more than ever before in the quality of the merchandise which she purchases", reports the managing director of the National Retail Dry Goods Association in the same issue. "She wants to know—will it give satisfactory service; is she getting maximum value for every dollar that she spends? As usual, the N. R. D. G. A. is ready and willing to meet this trend in consumer demand. Where a demand for a merchandise standard exists, we have worked with the interested consumer organizations as well as with the producers of the merchandise itself. To date much progress has been made and, largely through the efforts of this association, standards have been established on the following: The sizes of bed blankets; methods of testing and reporting on woven dress fabrics as to crocking, cleaning, laundering, color fastness to light and perspiration; the marking of gold filled and rolled gold articles; hosiery lengths; standard methods of measurement and standard measurements for knit underwear; specifications covering the width of wallpaper, length of single roll, and coverage surface; and standard minimum measurements for men's pajamas made from woven fabrics."

ADVERTISING AND SELLING editorializes in its January 28 issue "In Favor of Fewer Adjectives" and discusses the trend in business toward factual advertising. . . "Facts May Be Fashion of 1937", *Women's Wear Daily* states in its December 29, 1936, issue. . . "If 'Women Want To Know' It Will Pay To Tell Them", observes *Retailing* in its January 25 issue. "That is the honest stand taken by more than one New York advertising manager confronted with news of the broad campaign for fiber identification of the New York City Federation of Women's Clubs. The slogan of the movement, participated in by 40,000 women members of 240 metropolitan clubs, is that 'the women want to know.' Borough representatives at a recent city-wide meeting resolved to request stores to mark their sales checks with the fiber content of merchandise, the checks to be forwarded to the Federal Trade Commission as tangible proof that 'the consumer wants to know.'"

FIRST permanent national organization in which both consumers and retailers meet on a common basis to discuss the development of standards is the Advisory Committee on Ultimate Consumer Goods of the American Standards Association. Government offices represented on this committee are the Bureau of Home Economics, the National Bureau of Standards, the Consumers' Project. Consumer organizations represented include the American Association of University Women, the American Home Economics Association, the General Federation of Women's Clubs, the National Congress of Parents and Teachers, the National League of Women Voters. Trade is represented by the National Association of Purchasing Agents and the National Retail Dry Goods Association. At its February meeting standardization problems in sheets, cotton yard goods, hosiery, bedding, electrical refrigerators, shoes, color permanence were threshed out. Consumers can follow news on this committee's work through *Industrial Standardization,* monthly organ of the American Standards Association, New York City.

EDUCATORS, too, are alert to the consumer demand for education in wise buying. The National Council of Business Education and Affiliated Associations reports in the February issue of its *Journal of Business Education* a plan for the creation of a national organization to act as a clearing house of information and a research agency on consumer problems, primarily for the benefit of commercial teachers. Out of this proposed organization are expected to come plans for courses in consumer business education for use in the schools of the country.

TUNE in on your Counsel in Washington. Every Tuesday at 4 p. m., eastern standard time, the Consumers' Counsel of the AAA broadcasts over the N. B. C. Red Network, in a dialogue with an officer of the General Federation of Women's Clubs. Find out from your local N. B. C. station the hour when this program is broadcast in your city. It gives you timely helps on consumer problems.

Back of Your Pound of Butter

A guide to Federal services that aim to safeguard the purity and identify the quality of the butter you buy.

"ADD a lump of butter, the size of a walnut" runs almost like a theme song through recipes for soups, sauces, and desserts. One reason is that butter improves the flavor of many dishes. But pleasing flavor is only one of the dietary virtues of this food. Butter is one of the most easily digested of the common concentrated fats. Its 3,325 calories per pound make it high in fuel value. It ranks, too, as an "excellent" source of Vitamin A, and among milk products it is the best source of the sunshine Vitamin D, hardest vitamin to find in the regular food supply.

To please consumers' palates there are butters of many flavors on the market, but all of them must be made "exclusively from milk or cream, or both, with or without common salt, and with or without additional coloring matter, and contain not less than 80 percent by weight of milk fat, all tolerances having been allowed for."

Congress defined butter in these words in 1923. It is the only food which has the distinction of a legal definition. This definition was made both for the protection of the consumer and the conscientious butter manufacturers, who were finding it difficult to compete with a minority of unscrupulous butter producers selling an inferior product. This definition, stating the minimum standard of fat content for all butter, does not measure the purity of materials used nor the sanitary conditions under which the butter must be made. With the exception of process or renovated butter sold in interstate trade, the Federal Government has no direct supervision over the making of butter. Such regulations are left to individual States.

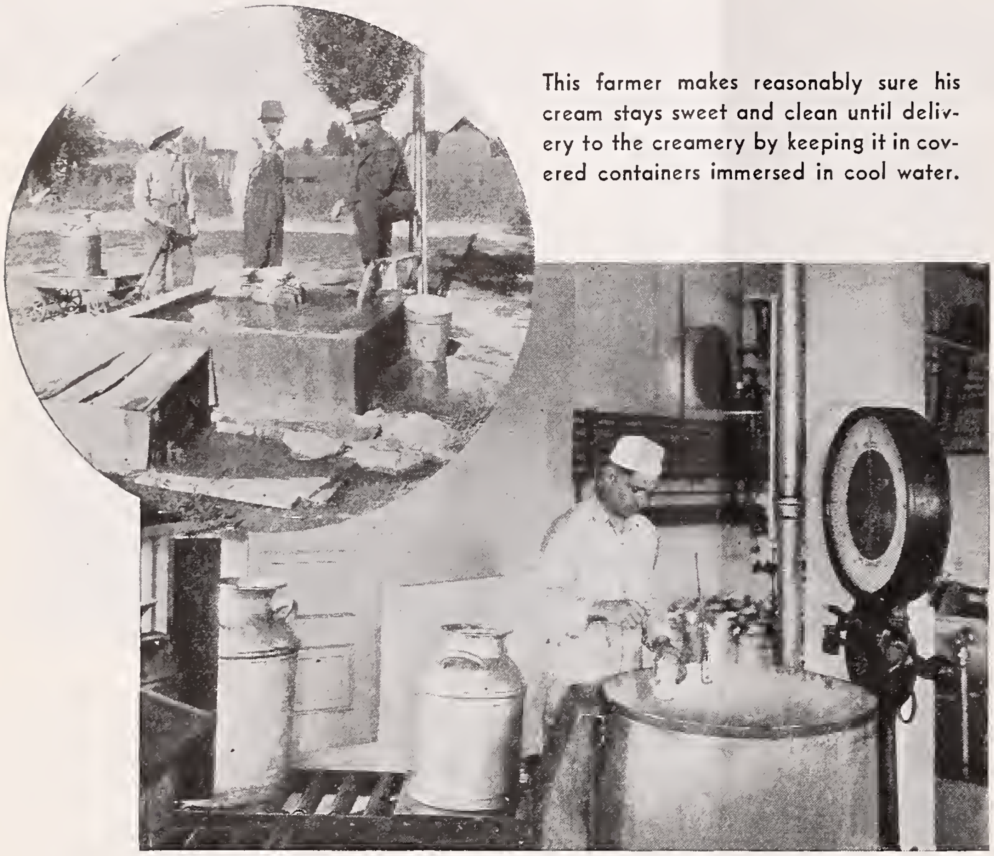
After butter is made the Federal Government, through the Food and Drug Administration of the Department of Agriculture, takes a legal interest in the purity of all butter shipped in interstate trade.

If Food and Drug officials discover that a shipment of butter does not have the legal fat content or if it does not measure up to the "sound and clean" requirements for all foods under the regulations of the Food and Drugs Act, the entire shipment is subject to seizure and the responsible shippers liable to criminal prosecution.

Greatest percentage of butter is made of sour cream. It takes about 10 quarts of milk averaging 3.9 percent butterfat to make one pound of butter. Cream, too, is a food that comes under the regulations of the Food and Drugs Act. The Food and Drug Administration is always on the lookout for unwholesome cream en route in interstate trade to establishments making butter.

Cream is a delicate and perishable food. The greatest care must be taken to keep it sanitary. In an old English book, published in 1631, the author says of the treatment of cream for butter, "You shall not keep above 2 days in summer and not above 4 days in winter if you will have the sweetest and best butter." This limitation on keeping time was the best rule then known for reducing the risks to the cleanliness of cream. Science since has developed other protections. Today, as of old, clean pure cream is still the basic requirement for fine quality butter.

Many butter manufacturers, aware that if care is not exercised deterioration in cream quality can start on the farm, have been cooperating with the Food and Drug Administration to correct carelessness in the handling of cream. In many sections they have been running campaigns to educate their suppliers to the importance of producing and delivering clean cream. For many years the Bureau of Dairy Industry has advocated the superior quality of butter made from sweet cream which has been ripened under controlled conditions. It has pointed out that delivery of whole milk to creameries and dairies would provide such cream



This farmer makes reasonably sure his cream stays sweet and clean until delivery to the creamery by keeping it in covered containers immersed in cool water.

Testing for acidity. Butter makers used to believe it was necessary to use cream of a distinctly acid taste to make butter that would keep. Bureau of Dairy Industry investigations demonstrated that while this was true in making butter from raw cream, the opposite was true in making butter from pasteurized cream.

better, as a rule, than infrequent delivery of the cream itself from the farm. Today more and more creameries are buying whole milk, separating it themselves, and making their butter from pasteurized cream having a low acidity or from perfectly sweet pasteurized cream.

Thanks to this activity of quality-minded butter makers, the Department of Agriculture, the vigilance of the Food and Drug Administration, and to legislation on butter in some States, the comfortable theory that "cream is cream", and that any cream will make good butter, is being discarded. As consumers grow increasingly insistent on graded butter, still more butter manufacturers will become cream-grade conscious. Good quality butter cannot be made from bad quality cream.

Dairy experts and consumers agree that in judging the quality of butter, "it's taste that counts." Pleasing flavor is most important, but the texture, color, salt content, sanitary and attractive wrapping also influences the housewife in asking repeatedly for the same brand of butter. It is these identical factors which the Bureau of Agricultural Economics of the U. S. Department of Agriculture considers important in grading butter.

Quality of Government graded butter—whether it is AA, A, B, C, or D quality—is indicated by a score. The maximum rating for flavor is 45 points; for body, 25; color, 16; salt content, 10; and package, 5. Grade AA butter is 93 score or above; grade A is 92 score; grade B, 89 score; and grade D, 84 score.

When you buy Government graded 92 or 93 score butter, you will find a certificate of quality with the official grade, score, and date of grading in your package, or you may find this information printed on the paper enclosing your quarter pound or pound of butter. Butter below 92 score may be Government graded, but the official score is not recorded on the package when sold to the consumer, though the bulk wholesale package or tub may bear the official stamp.

Grading butter is at present purely a voluntary service administered through the Bureau of Agricultural Economics. Any firm or agency which requests it may, for a small fee, have its product graded. In every State where the service is now established, it is rendered through the cooperation of some department or branch of the State Government.

Graders judge the flavor of butter as a consumer does—both by the aroma and taste. "Highly pleasing", "fine", "sweet and clean", are flavors that come only from butter made with sweet-flavored cream and give the natural aroma of clean sweet cream. These are desirable flavors and receive a high score. Objectionable flavors, or taints—rating lower scores—range all the way from foreign flavors not natural to butter, such as a fruity taste, to "off" flavors which may indicate that the butter is rancid and exceedingly unpalatable.

"Body" of butter is largely dependent on the method of preparation and the skill of the butter maker. Fine-quality butter should have a waxy, firm body and a jagged irregular edge when broken. If it crumbles easily, or is brittle, or if it has excessive moisture, it is considered defective and receives a lower score.

Consumers' tastes vary in the color of butter. Some sections of the country prefer a light-colored butter, others a straw-colored product. A certain range in coloring is permitted and full rating is given both for light and medium color. The natural color of butter also varies with the season. In the summer, when the cows are on pasture, no artificial coloring is needed in butter to give it an appetizing color. The maximum of about four drops of butter coloring per pound of creamery butter is used during the winter months. Two kinds of butter coloring are usually used. One is an extract of the annatto seed, a plant grown in South America, and the other is a coal-tar dye. Butter must be uniform in color to receive the full score. Defects are waviness due to uneven distribution of water and salt, mottles or light-colored spots, and streakiness.

Preference in salt content, as in color, varies in different sections of the country. Though the trend is toward a light salt content, some markets require a highly salted butter. If the salt is completely dissolved and the butter is free from a briny or gritty condition, the score on this point is high. Unsalted butter is naturally not graded for salt content but is described on a certificate of quality as "unsalted."

Cleanliness, neatness, and finish, both of the inside and outside of the wrapper of the butter carton, are considered in the maximum 5 points given for general appearance of the package.

Butter grading has been a Government service since 1919. At the present time there are 21 Government grading stations in the country. During the last fiscal year the total number of pounds graded was 9 percent larger than the previous year. Fifteen percent of the entire creamery butter production of the United States was Government graded.

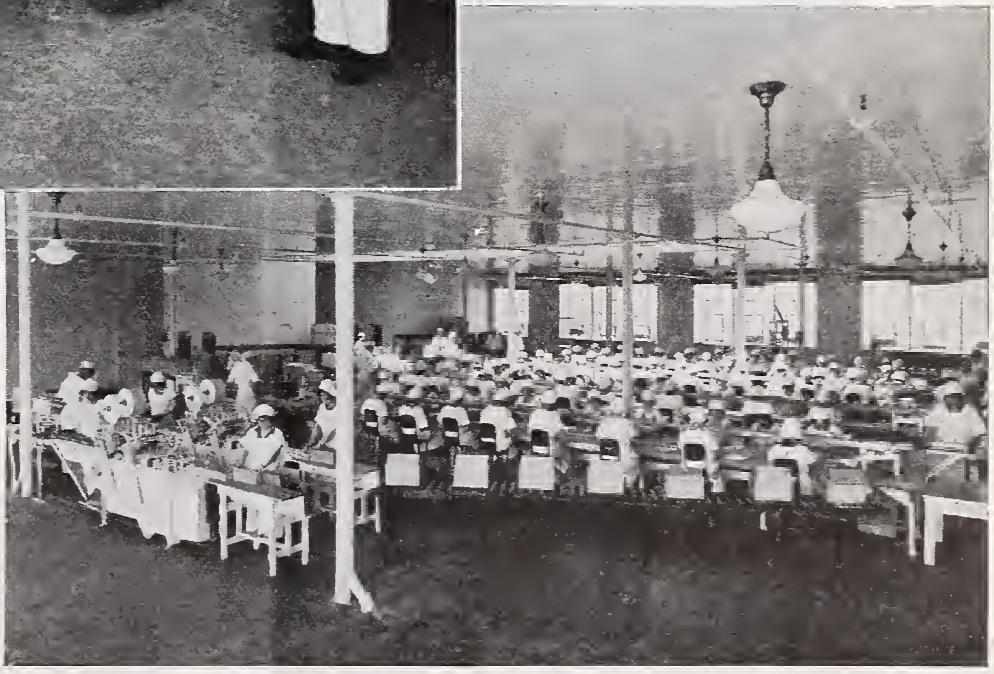
Government-graded butter is indirectly a sanitary protection for the consumer. Though grading primarily designates the quality and not the wholesomeness of the product, fresh pure cream carefully handled is essential in making good butter.

Trade marks on butter are often tempting but misleading. Oregon and California are protecting their consumers by special labeling laws for butter. Such phrases as "June flavored", "made from cream richer than whipping cream", sound attractive but do not tell the consumer the quality of the cream from which the butter is made.

When you buy process or renovated butter, which are two names for the same kind of product, and the making of which is supervised by the Federal Government, you will always find legibly printed or stenciled on the package the statement, "Process or Renovated Butter."

Process butter is a reconditioned food. Consumers are accustomed to buying reconditioned furniture, typewriters, automobiles, but a reconditioned food is still unique. Relatively little of this type of butter is on most markets. For every pound of process butter, about 1,000 pounds of the regular kind are sold.

United States butter graders here are examining samples for flavor, body, color, and salt content.



Great care is taken in this print room of a model creamery to see that the butter is packaged and packed in a sanitary way.

Process-butter plants buy lots of packing-stock butter and by melting and refining and churning make it into a new product. Packing-stock butter is a trade name for miscellaneous lots of butter collected and put in one container and offered for resale. Due to the many seizures of packing-stock butter by the Food and Drug Administration, relatively little of this butter is on the retail market today.

Materials, methods, and sanitary conditions in plants where process butter is made are regulated by the Department of Agriculture. Government inspectors have access at all times to every part of the process plant and warehouse. Water and ice used in processing must be wholesome. All milk and cream used must be pasteurized. Other materials, such as salt and butter, entering into the manufacturing of renovated butter must be handled in a sanitary manner. A sample is periodically taken from each lot of the finished product and sent to the Department of Agriculture for a chemical analysis. If examination shows that the butter intended for export or for interstate trade is unwholesome, the entire shipment may be condemned for all food purposes.

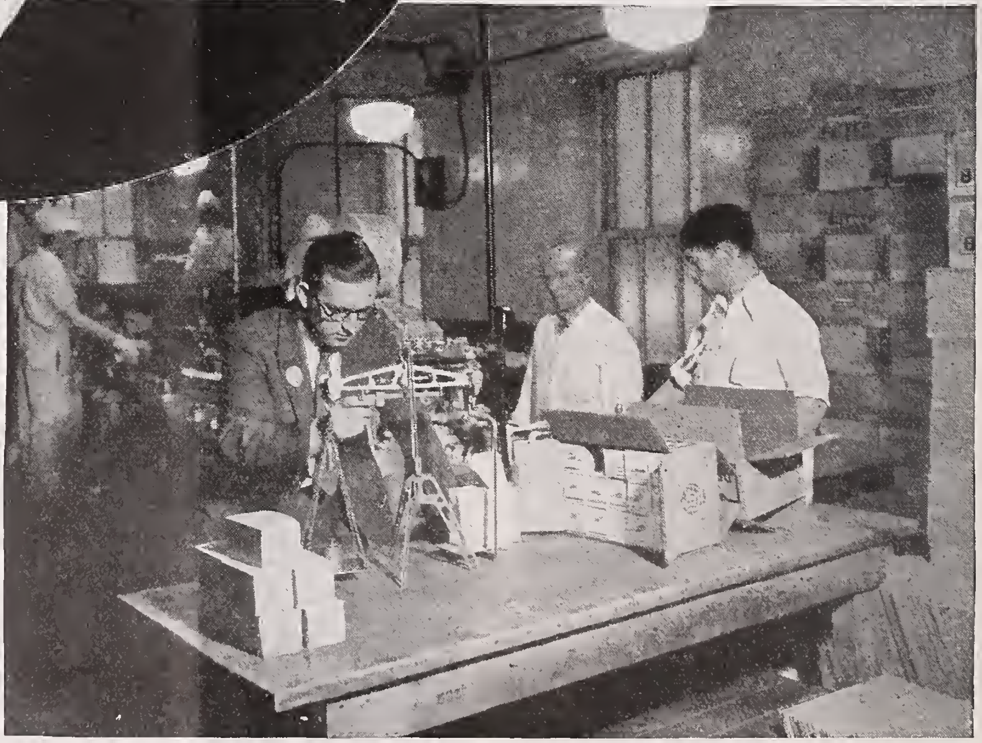
CERTIFICATE OF QUALITY
Issued by Authority of the
United States Department of Agriculture

Officially graded butter of 92 or 93 score quality often contains a certificate of quality. Sometimes this information is printed on a paper enclosed with the pound of butter.

Authority for supervision of the manufacturing of process butter comes from the sanitary provisions of the Meat Inspection Law which Congress made to apply to process-butter factories.

All States have sanitary regulations on food products, which are general in scope and cover such factors as health of employees, adequate water supply, proper ventilation and sewerage in establishments where food is handled. Often these regulations are not specific enough in character to cover adequately the material and manufacturing methods used for a particular product. Minnesota, Iowa, and Mississippi have mandatory cream grading laws which apply to the manufacturing of butter. The wise consumer will investigate the dairy legislation in his own State and municipality to see if it thoroughly covers hygienic regulations needed in the cream and butter industry.

More facts for statistically minded butter consumers come in "Trend of the Butter Industry in the United States and Other Countries", Department of Agriculture Circular No. 70, D. C., which can be purchased for 5 cents from the Superintendent of Documents.



Food and Drug officials test butter for accuracy in weight as well as for fat content. Every pound of butter sold in interstate commerce must be 80 percent milk fat.

Five Days with Ohio's Consumers

Our inquiring reporter, concluding his rapid survey of consumer activities in five Ohio centers, tells here about consumer doings in Cleveland and Dillonvale. This is the second of two articles on Ohio's consumers.*

OHIO'S largest city is Cleveland with a population of 900,000. Here a number of women's organizations have been carrying on programs of consumer education. Last year the Parent Education Committee of the Cleveland Parent-Teacher Council sponsored an all-day Consumers' Forum. The Women's City Club has a Committee on Consumer Interests. Just now setting up its program of study, this group expects to consider quality and price factors in consumer goods, consumers' cooperatives, and consumer legislation with special emphasis on the proposed Food and Drugs Act. The Consumer Protection Committee of the League of Women Voters is working in cooperation with stores to secure wider use of recognized sheeting specifications in advertising and in store displays. Other matters having the attention of this group are the testing of canned goods, and food and drug legislation.

Cooperators in Cleveland started their activities with a downtown discussion club. This arrangement proved all right for discussion, but did not work very well when the group started to handle merchandise. Housewives insist on having their groceries close at hand. Result was that the Cleveland group organized buying clubs in different sections of the city and suburbs and in October 1936 set up the Greater Cleveland Cooperative Federation to coordinate the work of the member cooperatives.

Breadth of the Cleveland Cooperative program is shown by the committee activities. The education committee has divisions on speakers, publicity, and literature, along with group contact committees for women's clubs, young people's groups, churches, and labor unions. The business committee has subcommittees on joint purchasing, coal, milk, clothing, electrical equipment, motor products, dry cleaning and laundry service, medical service, housing, and credit union. A difficult job is that of the investigation committee, "to investigate (1) working conditions under which goods are produced for co-ops, and (2) quality, purity, suitability, weight of goods or services handled by local co-ops."

Equally ambitious are the business enterprises of members of the Greater Cleveland Cooperative Federation. As in many another State, foreign-language groups brought their cooperation with them from the old country. The Slovenian

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*The first article of this series appeared in our February 22 issue.

Cooperative Stores Co., 23 years old, has 625 members. Total sales from the three stores operated by this company amount to over $12,000 per month. The Workingman's Cooperative, started by the Bohemians, has 1,100 members. This organization is 24 years old and does a business of $100,000 per year through three store outlets.

To the west of Cleveland is Lakewood, Ohio. The Lakewood Consumers' Cooperative, Inc., with 175 members, is the only other member of the Cleveland Cooperative Federation to operate a store. The East Side Consumers' Cooperative does not have a store, but it does have a full-time manager of its collective purchasing activities which amount to over $1,000 per month. The Wage Earners' Cooperative Service is operated for and by Negroes. January 4, 1937, saw the organization of a corporation by the Downtown Consumers' Cooperative for the main purpose of establishing a cooperative restaurant.

Folk schools are held in northeastern Ohio to promote the cooperative idea. Basic idea of these folk schools is to bring together high-school graduates who are out of jobs or who can get away from the home farm for a week's intensive course on the cooperative movement. Ministers of four rural churches in Trumbull County originated the idea 2 years ago. They are now holding their sixth school. Average attendance has been 25 students.

Plan for a folk school calls for housing facilities. A grange hall or a church is generally used. All but one of the folk schools have been coeducational affairs. Students study, play, eat, and sleep in the buildings where the school is held. Charge for the week is $3.50 which covers all expenses, and even this amount may be paid in farm produce.

Course of study of the school includes courses in the History of Cooperation, Principles of Cooperation, Organization and Administration of Cooperatives, Public Speaking, Kagawa and the Kingdom of God Movement in Japan, and a study of folk games. Included in the crowded school day are two recreation periods and a library hour.

Stopping at one of the folk schools in progress at Greenford, Ohio, your inquiring reporter found a group practicing a new folk dance they had just learned. After students have graduated from an elementary folk school they may attend an advanced school. After completing a folk-school course the students become members of the North-East Ohio Cooperative Fellowship, which holds quarterly meetings for the promotion of the cooperative movement.

Trumbull County not only promotes cooperatives by a folk-school movement; it has the Consumers' Cooperative Association at Warren, the county seat. This organization operates a gas station which handles groceries on the side, and has contracts with stores so that members may buy shoes, tires, coal, and dry-cleaning service on a cooperative basis. The present membership is 100. The Trumbull County Farm Bureau Cooperative Association has just hired a full-time educational director.

Dillonvale, typical coal mining town in southeastern Ohio, with a population of 1,600, furnishes an example of how a cooperative functions in a small community. Hardly a week goes by without a visitor from an Ohio town or city or some nearby State coming to find out how the New Cooperative Co. of Dillonvale does business. Cooperation in Dillonvale is ancient history. In 1904, 10 Bohemian miners in this village organized a buying club. Four years later they decided to start a cooperative store and with their own hands built the store building and set up shop.

A member of the cooperative became the manager. Today this man is still guiding the destinies of the New Cooperative. Starting with 35 mem-

Consumer economics is one of the required courses in the curriculum of the John Hay High School, Cleveland. 3,600 students are enrolled in this school.

Sponsorship of this band is a part of the program to promote cooperative recreation directed by the New Cooperative of Dillonvale.

This modern business block, purchased at a cost of $50,000 in 1921, is the largest of nine retail outlets operated by Dillonvale's New Cooperative. In the block are stores for groceries, meat, dry goods, and hardware.

bers late in 1908, the store did $600 worth of business the first year. Not until the third year of operation were they able to pay a patronage dividend. In 1936 the volume of gross sales was $635,000, an increase of $100,000 over the year before. Membership is now 822. Dividends for 1935 were $19,000 on a $539,000 business.

From a small one-room store built with voluntary labor the New Cooperative has expanded till it now has seven retail outlets in nearby communities and a grocery store and a large business block in Dillonvale. This business block was purchased in 1921 for $50,000, and houses four up-to-date stores selling groceries, meat, hardware, and dry goods. Latest business undertaking of the cooperative is a meat-packing plant to provide meat for all of its stores. Wasting nothing, this plant manufactures fertilizer out of the animal parts not sold as food.

Records of the past 28 years show three periods in the life of the New Cooperative when business took a decided slump. On the margin of the report at those three places is a single word, "Strike", which reveals the story. Strike periods plus the seasonal nature of coal mining have made it necessary to adopt a practice not used by most cooperatives. All but three of the cooperative stores extend credit.

Other unusual features are found in the New Cooperative. Membership is gained by the purchase of a $10 share which may be secured by allowing patronage dividends to accumulate after an initial payment of $1. Share investment is limited to $40. No interest is paid on these shares. Capital stock is regarded not as an investment for profit but rather a contribution to keep goods on the shelves to serve needs. Shares are not transferable but can be redeemed at any time at full value. Par value never changes. These safeguards eliminate speculation and keep the control of the cooperative on a thoroughly democratic basis.

Recently organized by the cooperative was a credit union which now has 140 members. In its fourth year is a community band sponsored by the cooperative. Now employing over 50 workers, the cooperative has set up a youth-education program to train young people who are interested in entering cooperative work.

News of other consumer and cooperative activities was heard at every stop on the trip. A few random notes will indicate that this bird's-

[Concluded on page 23]

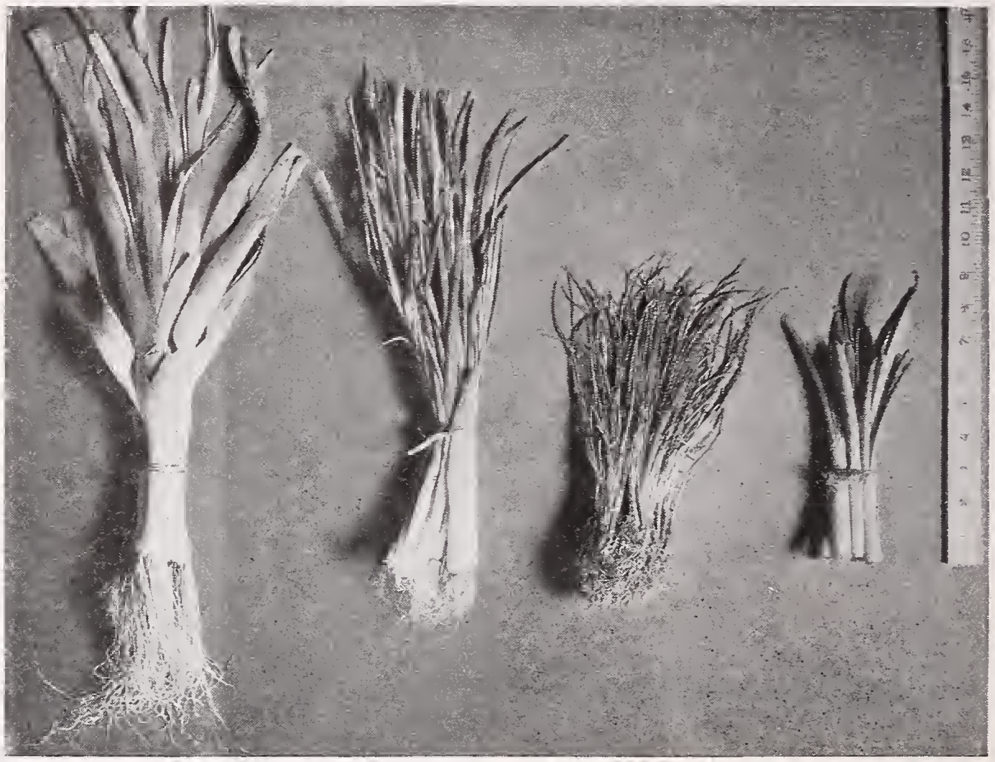
No.1 Flavor Food

Always high in flavor and nearly always low in price, onions need only these two claims to a solid place on the American menu.

STRENGTH has been synonymous with onions since the days when the builders of the pyramids staged a strike because they did not get their daily onion quota. Because the history of the onion goes back so far, more superstitions have had time to gather round it than around any other vegetable. But science in these days has thrown cold water on most of the onion's claims to magical virtues.

One magic, science has not yet succeeded in stripping from the onion. That is the strength of its flavor. Good cooks recognize and use this magic to transform otherwise dreary food into appetizing dishes. The onion is especially welcome in canny households where food money must go far. Low-cost diets can be rescued from monotony and tastelessness by the judicious use of flavor accents. And onions are our No. 1 flavor food, as any French chef would verify.

Food values of onions are not spectacular. The winter onion which we buy out of storage has some Vitamin B, while the young green onion likely makes a showing in Vitamins A, C, and possibly G. Like other vegetables, they help along with such matters as mineral supply and the necessary quota of bulk of fibrous food for tone and tempo in digestive processes. But however meager the contribution of the onion to food value, we must remember to chalk up a mark of gratitude for its relatively low price tag. So for its flavor values at low cost the onion deserves its place as a staple on the market list.



Measured against the ruler, from left to right, are leeks, shallots, chives, and scallions as they appear in the markets.

Flavor of the onion is in its volatile oil. The potency of this flavor varies with the variety of onion. But even in the same variety, experiments have shown that the potency can also vary with the soil in which the onion grew, the climate, the amount of moisture, and other factors of its individual life.

"Northern grown" winter storage onions include both the most potent and the mildest flavored types of onion. The common onion on the winter market, usually ranging in diameter from 1¾ to 2½ inches, includes some of the strongest varieties like the "Yellow Globe", the "Red Weathersfield", and the "Prizetaker Southport White Globe." Their flavor is generally regarded as too pungent for eating raw, and they take their prime place on the menu as a vegetable boiled, baked, and fried, or as the flavor accent of other cooked foods.

Mildest flavored onions, also northern and western grown, are the sweet Spanish type like the Valencia. They grow larger, a slice measuring sometimes as much as 4 to 5 inches across. These are the onions people slice for eating raw in sandwiches and salads. Among these onions color seems to signify strength of flavor. The light yellow straw-colored ones are likely to be milder, and the amber, golden, and darker brown ones stronger.

Northern-grown onions make up the lion's share of our market onions. The growers start harvesting them in August, cure them, send them to storage, and from these stocks our onion supply is drawn until warm weather makes them sprout too much to please consumers. April usually sees the last of these winter-storage onions on the market.

Bermuda onions, which come not from Bermuda but from Texas and California, are not as a rule so large but are mild like the Spanish type, and can be substituted for them for raw purposes as well as for the other winter onions in cooking. By their flat shape consumers can recognize Bermuda onions, which come to market during the months from April through July.

Creole onions make up a small percentage of the onions used in the spring months. Grown in Louisiana, as their name suggests, they go mostly into home consumption.

Leeks, not strictly onions, are the only long green type used primarily as a cooked food. Though they are not so well known as many of their cousins, they deserve more fame for their distinctive kind of onion flavor which makes its own magic in such dishes as Irish stew. Some people serve them like asparagus in butter sauce with or without toast.

Commonest type of green onions, scallions, are the strongest of the onions usually eaten raw. They find their spot on the appetizer tray or in salads and sandwiches. They can also be used interchangeably with the stronger dry winter onions in recipes calling for a strong flavor accent. They come to market nowadays from the South as early as January and continue with the help of local gardens through June.

Shallots are a milder, smaller type of green onion, without the bulb development which the scallion has, and measuring about one-fourth to half an inch thick, on the average. They are used raw, too, or for flavoring in cooked dishes. They come to the northern market from southern gardens beginning in October and continuing through February. If the recipe calls for them in their off season, substitute Bermuda or northern-grown onions or chives.

Chives transplanted from the herb garden will grow comfortably on the window sill all winter long. They are tiny threadlike onions, clumps of which are sold in baskets in the market from October through June. They are quite mild but because of their own delicate flavor and because they can be kept on hand fresh the year around they deserve the special attention of smart cooks.

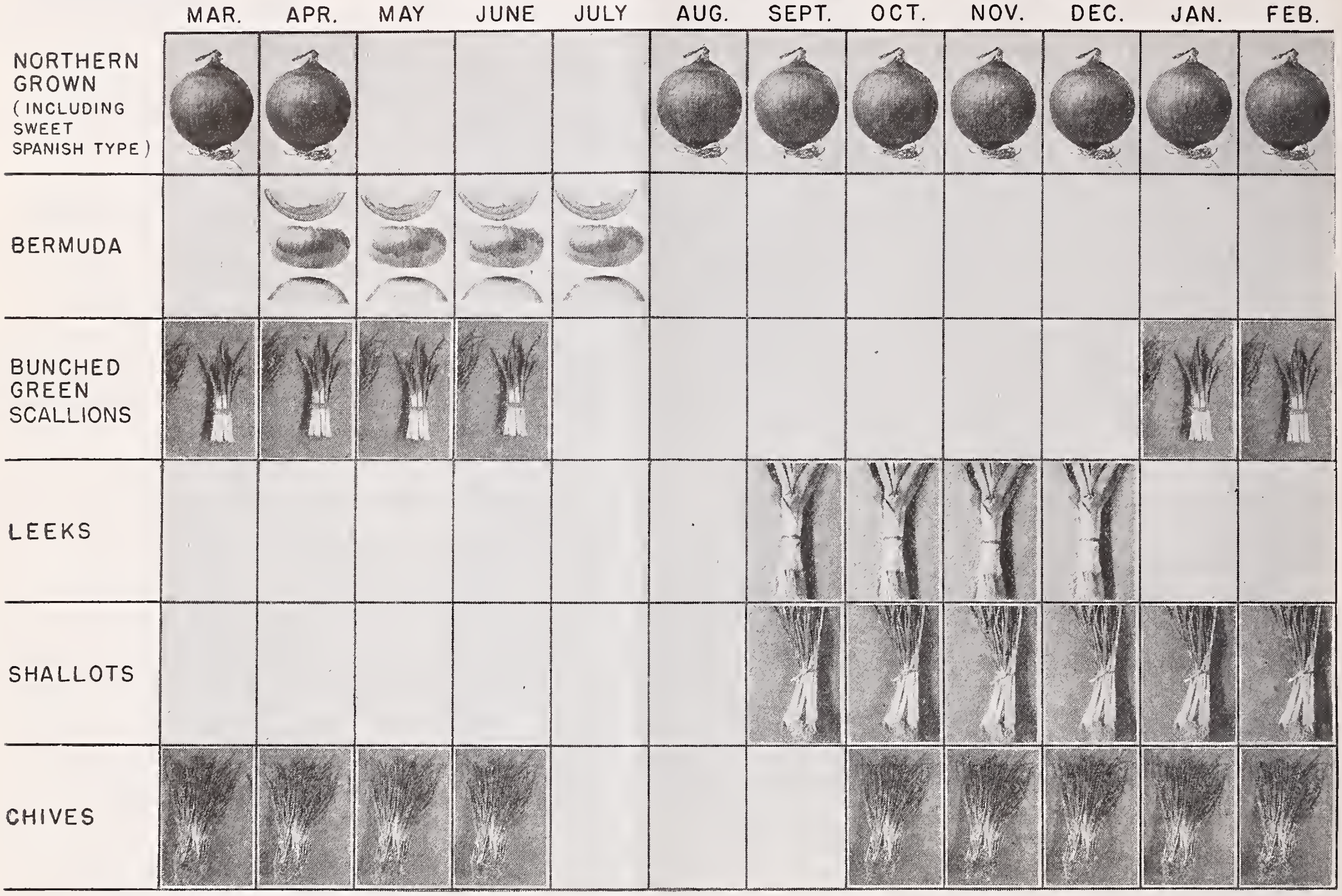
Pickle onions and pearl onions are merely small members of white northern-grown onion families, carefully selected for size and shape.

Garlic stands in a place by itself. Where the onion is a battleground for the pros and cons of epicures, the garlic is in the front line. It is different botanically, being formed in separated "cloves" under one skin instead of in concentric layers, and its volatile oil has even more pervasiveness. It is not well known in most of America, though salad connoisseurs are spreading its aroma with tips on rubbing the bowl with a cut clove of garlic. It is available the year around in grocery stores, since it is stored dry. At home it can be kept on hand as well, since its

An onion field (right) in full bloom about 4 weeks before seed harvest. . . Onions are pulled when their tops begin to die. For 3 or 4 weeks they lie in the onion fields until the tops wither. Then they are gathered in crates (below) or open-meshed bags and left to cure standing in the fields.

Some rich muck lands yield from 1,000 to 1,400 bushels of onions to the acre. In this northern Ohio field the yield was 400 bushels. Northern onions, which make up the lion's share of our market onions, are grown largely in Ohio, New York, Indiana, and the Great Lakes States.

ONION CALENDAR



	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.
NORTHERN GROWN (INCLUDING SWEET SPANISH TYPE)	●	●				●	●	●	●	●	●	●
BERMUDA		●	●	●	●							
BUNCHED GREEN SCALLIONS	●	●	●	●							●	●
LEEKS							●	●	●	●		
SHALLOTS							●	●	●	●	●	●
CHIVES	●	●	●	●				●	●	●	●	●

cloves can be conveniently detached as needed. Housewives in chary families keep their garlic in a closed jar on the shelf and use it as discreetly as its character allows.

Garlions are being offered on the market as a compromise cross between garlic and onions for those who cannot quite make up their minds to take garlic to their bosom. Some say that garlic without its strength would be pointless, that consumers either like it for that quality or would have none of it in any case. Similar arguments are offered against the threatened "odorless onion." They say if you take away an onion's flavor, what is there left?

Superstitions designed to defeat the onion in its effect on your tear ducts are mostly useless. The only way to keep the weeping down to a minimum is to peel the onions in running water. In the class of onion superstitions should go most of the claims for destroying the effect of onions on the breath.

Grades for onions were among the first the Bureau of Agricultural Economics issued, because onions move in such volume in the market. Nowadays most buying and selling of onions from grower to retail store is done on the basis of Government grades, which apply to Northern Grown, Creole, and Bermuda onions. Under "Northern Grown" and "Bermuda" there are classifications of "boilers" for small-sized onions. Northern-grown onions still smaller than 1 inch can be graded as "picklers." Consumers cannot usually buy onions by grade unless they can use a 50-pound sack.

To select good onions of the dry types, look for ones that are bright, clean, hard, well shaped, and dry. Those with a thick, tough neck are not desirable. Look at the neck and the base as well as the outer skin for indications of rot. Misshapen onions are not eligible for high grades, but to consumers their only objection is the possibility of waste.

Green onions, leeks, and shallots, to be top quality, should have fresh green tops and medium-sized necks which are white for at least 2 or 3 inches from the root. They should be young, crisp, and tender. If the tops are wilted or yellow, twist the neck and puncture it with the thumbnail to see if they are old and flabby or have tough and fibrous necks. If the tops are merely bruised, they

[Concluded on page 22]

Eggs for Lent

As egg prices go into their springtime downward swing, thrifty meal planners remind themselves to take frequent advantage of this bargain in food value.

HENS usually provide a bigger supply of eggs in the spring months than in any other season of the year, which means that in the average year lowest egg prices to consumers are nicely synchronized with Lenten menus. Even when egg prices are not especially low, eggs are often good buys from the point of view of what they give toward the body's health. At present prices eggs are a bargain purchase.

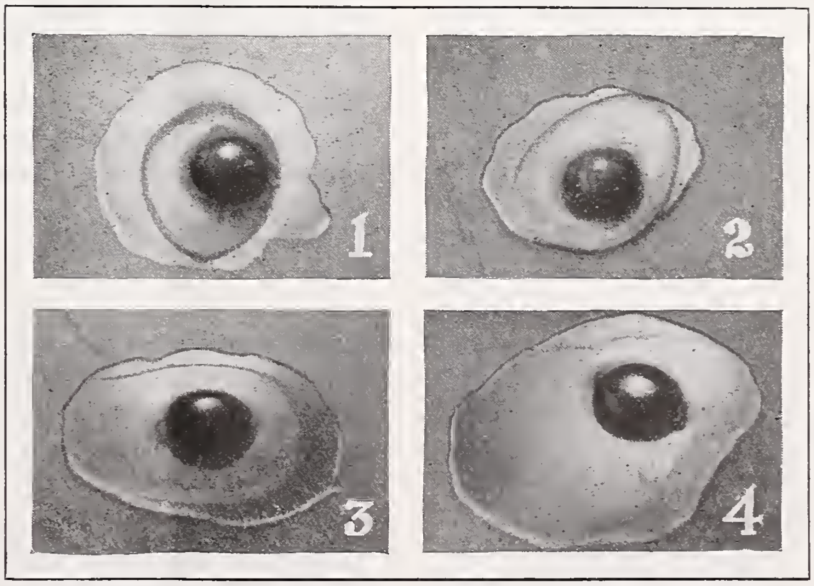
High price or low, families who can manage it make sure of the daily egg the doctor orders for each child. They contain every food value known to nutritionists. In both the white and the yolk there is Vitamin G and protein for building muscle and tissue. The yolks are a rich sourch of iron for red blood, a good source of phosphorus and calcium for bone building. They contain some Vitamin B, and—if the hen has had the right food—Vitamin A. Even Vitamin D, so scarce in ordinary foods, turns up in eggs from hens that have been kept in the sunlight or fed vitamin-enriched foods. Sometimes consumers can find statements about this on the box.

Economical consumers buy the grade of egg that suits the purpose for which it is to be used, since food value probably does not vary with quality. For poached eggs, eggnog, etc., the top quality goes on the list. That means Grade A or U. S. Extra, in most markets where Government-graded eggs are now sold. There is a higher grade, U. S. Special or Grade AA, but the specifications for this grade limit it to very rare appearances in retail stores. Good food for most uses are Grade B or U. S. Standard eggs.

Grades are based on certain indications as to whether the attributes of a new-laid egg have been preserved. As the egg deteriorates, its liquids evaporate and the contents of the egg shrink, leaving a larger space at the end between the egg and its shell. In U. S. Extras this air cell must not be more than one-fourth inch deep. The yolks must be fairly well centered and moderately defined, with no visible germ development or other blemishes, and firm, clear whites. The shell outside must be clean and sound and normal. When a top-grade egg is broken the yolk will stand up firm and round, and even the white will keep its shape instead of spreading out entirely flat.

Size has nothing to do with quality. Any size eggs—small, medium, or large—may rate Grade A. But graded eggs are classified for size. A dozen eggs labeled "large" under U. S. Government grade definitions must weigh 24 ounces—a pound and a half. A dozen medium eggs must weigh 20½ ounces, and a dozen small eggs, 17 ounces. To decide which size is most economical, figure out which size eggs cost least per ounce. Suppose, for instance, a dozen large eggs cost 36 cents. That means you pay 1½ cents per ounce for the eggs. Say a dozen small eggs of the same grade sells for 30 cents. It may look cheaper but figure it out, and you get a price of 1 13/17 cents per ounce. In that case the bargain price of the small eggs was more expensive in terms of egg for your money.

Tips on using eggs to best advantage are published in the Bureau of Home Economics bulletin, "Eggs at Any Meal", for sale at 5 cents by the Superintendent of Documents, Washington, D. C.



Compare the conformation of the white of these eggs which, under United States standards, grade respectively as U. S. Special, U. S. Extra, U. S. Standard, U. S. Trade.

Consumers' Bookshelf

Ninth installment of our bibliography for students of consumer problems, prepared in cooperation with the Consumers' Project of the Department of Labor, brings together references on grades and standards. Mention of material here does not imply an endorsement of the point of view of the author by the CONSUMERS' GUIDE.

STANDARDS

Pros and Cons of Standards

STANDARDS FOR CONSUMER GOODS, by Ruth O'Brien. September 1934, 13 pp., mimeographed. Reprint of a talk given at the Boston Conference on Distribution. Summary of the case for graded consumer goods and the statement of these grades and other helpful buying information on informative labels. Address: U. S. Bureau of Home Economics, Department of Agriculture, Washington, D. C. Free.

THE MOVEMENT FOR STANDARDS FOR CONSUMER GOODS, by P. G. Agnew. The *Annals of the American Academy of Political and Social Science,* May 1934, 10 pp. Summarizes the consumer standards situation, and gives the attitudes of manufacturers, advertisers, publishers, distributors, and consumers toward such standards. Points out some of the difficulties attached to a consumer standards program. Address: American Academy of Political and Social Science, 3457 Walnut St., Philadelphia, Pa.

STANDARDS—ACTION VERSUS WISHFUL THINKING, by P. G. Agnew. *Journal of Home Economics,* Vol. 26, No. 9, November 1934, pp. 1–5. Gives examples of the need of consumer standards and suggests ways in which standards can be promoted. Reprint available from: American Home Economics Association, Mills Building, Washington, D. C. 10 cents.

USE STANDARDS IN MERCHANDISING FOR BETTER RELATIONS WITH CONSUMERS, by H. W. Brightman. *Industrial Standardization and Commercial Standards Monthly,* Vol. 8, No. 2, February 1937, pp. 38–44, illustrated. Mr. Brightman, chairman of the Merchandising Division of the National Retail Dry Goods Association and chairman of the Advisory Committee on Ultimate Consumer Goods of the American Standards Association, is in a position to speak with authority on this subject. This article is based on an address at the Consumer Relations session of the 26th annual convention of the National Retail Dry Goods Association. Single copies of the February issue of Industrial Standardization containing this article and the one listed below may be secured from the American Standards Association, 29 West Thirty-ninth Street, New York, N. Y., for 35 cents.

WHY CONSUMERS WANT STANDARD SPECIFICATIONS. *Industrial Standardization and Commercial Standards Monthly,* Vol. 8, No. 2, February 1937, pp. 43–44. Contains statements by Dr. Faith Williams, of the American Association of University Women; Miss Florence Fallgatter, National Congress of Parents and Teachers; and Miss Ruth O'Brien, chief of the Division of Textiles and Clothing of the U. S. Bureau of Home Economics, given at the Consumer Relations session of the 26th annual convention of the National Retail Dry Goods Association.

STANDARDIZATION OF CONSUMER GOODS. March 1934, 14 pp. This pamphlet reviews, from the point of view of industry, the history of the standards movement and gives the official position of the Chamber of Commerce of the United States on standardizations of consumer goods and on Government grades and standards. Address: Chamber of Commerce of the United States, Washington, D. C. Free.

QUALITY STANDARDS AND GRADE LABELING. February 1935, 14 pp. A history of the efforts made during the Recovery Administration 1933–35 to obtain voluntary adoption of grades and standards by industry, and a statement of the attitude of the Chamber of Commerce toward quality grades. Address: Chamber of Commerce of the United States, Washington, D. C. Free.

STANDARDS, GRADES, AND LABELS. Bulletin 116–A. June 1936, 12 pp. National Canners Association describes Government grading and inspection services, the canning industry's attitude toward these services, and its own plan for standardization of descriptive terms. Address: National Canners Association, Washington, D. C.

A STUDY ON LABELING OF CERTAIN CANNED FOODS, by Homemaker's Section, District of Columbia Home Economics Association.

June 1935, 8 pp., mimeographed. Presents some of the issues in the grade labeling vs. descriptive labeling controversy. Presents diagrams of some ideal labels proposed by the Homemaker's Section. Address: American Home Economics Association, Mills Building, Washington, D. C. 25 cents.

TREND TOWARD CONSUMER STANDARDS FOR CANNED FRUITS AND VEGETABLES, by Paul M. Williams. U. S. Bureau of Agricultural Economics. November 10, 1936, 7 pp., mimeographed. Describes the legal basis for the grading of agricultural products. Compares informative with uninformative labeling. Address: U. S. Bureau of Agricultural Economics, Department of Agriculture, Washington, D. C. Free.

Advertising and Selling Series

Starting at the time of the NRA controversy over grade labeling of canned goods, *Advertising and Selling* carried a series of articles on the subject which explored the issues rather thoroughly. Copies of this magazine may be examined in most city libraries, or address *Advertising and Selling*, 9 East Thirty-eighth Street, New York, N. Y. Single copies, 15 cents.

WHY THE CONSUMER WANTS QUALITY STANDARDS, by Robert S. LYND, Chairman, Committee on Consumer Standards of the Consumers' Advisory Board of NRA. *Advertising and Selling*, January 4, 1934, pp. 15–16.

THE ARGUMENT AGAINST QUALITY STANDARDS: A REPLY TO THE LYND REPORT, by Charles Coolidge Parlin, Manager, Commercial Research, the Curtis Publishing Co. *Advertising and Selling*, January 18, 1934, pp. 22–23.

HOW ONE THOUSAND CONSUMERS WOULD USE GOVERNMENT GRADES, by Pauline Arnold. *Advertising and Selling*, March 1, 1934, pp. 22–23.

SHALL CANNED FOODS BE GRADED? by Alice L. Edwards, Executive Secretary, American Home Economics Association. *Advertising and Selling*, June 21, 1934, pp. 22–23.

WILL STANDARDS OF QUALITY HELP CONSUMERS? by G. B. Hotchkiss, Professor of Marketing, New York University. *Advertising and Selling*, September 27, 1934, pp. 29, 44.

WHAT THIS QUALITY GRADING BUSINESS IS ALL ABOUT, author not given. *Advertising and Selling*, September 27, 1934, pp. 26–27.

TO GRADE OR NOT TO GRADE? by Armin W. Riley, Division Administrator, NRA. *Advertising and Selling*, October 11, 1934, pp. 23, 42.

RE: GOVERNMENT GRADING, statements by G. B. Hotchkiss, Professor of Marketing, New York University, and F. M. Shook, Field Secretary, Tri-State Packers Association, Inc. *Advertising and Selling*, November 8, 1934, pp. 36–37.

GRADE-MARKS OR TRADE-MARKS? by G. B. Hotchkiss, Professor of Marketing, New York University. *Advertising and Selling*, November 22, 1934, pp. 30, 75.

WILL GRADE-MARKS KILL TRADE-MARKS? by Robert S. Lynd, Department of Social Science, Columbia University. *Advertising and Selling*, December 6, 1934, pp. 30–31.

Description of Existing or Proposed Standards

PRESENT GUIDES FOR HOUSEHOLD BUYING, by Ruth O'Brien and Medora M. Ward, U. S. Bureau of Home Economics. 1936, 36 pp. Discusses existing types of consumer guides and then surveys quality grades now in use for food products, clothing and textiles, household equipment and furnishings, dry cleaning, and laundering. Address: Superintendent of Documents, Washington, D. C. 5 cents.

CONSUMER AND THE STANDARDIZATION OF FARM PRODUCTS. October 1935, 14 pp., mimeographed. Describes the quality standards used by the Government in grading meats, poultry, eggs, butter, rice, honey, and canned fruits and vegetables. Contains pictures of exhibit panels illustrating Government grades. These panels are loaned free of charge to organizations. Address: U. S. Bureau of Agricultural Economics, Department of Agriculture, Washington, D. C. Free.

UNITED STATES STANDARDS FOR GRADES FOR FARM PRODUCTS AS IDENTIFIED FOR CONSUMERS. 1935, 7 pp., mimeographed. Contains brief statement of the method of indicating grades for beef, lamb, processed meats, eggs, poultry, butter, canned and fresh fruits and vegetables. Address: U. S. Bureau of Agricultural Economics, Department of Agriculture, Washington, D. C. Free.

BEEF GRADING AND STAMPING SERVICE, by U. S. Bureau of Agricultural Economics. Leaflet No. 67. 1932, revised 1936, 8 pp., illustrated. Contains a description of how beef grading and stamping are carried on as well as a discussion of the benefits of the service to stockmen, slaughterers, wholesalers and brokers, retailers, hotel keepers, and housekeepers. Address: Superintendent of Documents, Washington, D. C. 5 cents.

When You Buy Lamb, Look for U. S. Grades. Consumers' Guide, Vol. II, No. 14, May 6, 1935, pp. 7–9. Contains a picture showing the different retail lamb cuts and discusses the Government grades for lamb. Address: Consumers' Counsel Division, Agricultural Adjustment Administration, Washington, D. C. Free.

You Know What You Get When You Buy U. S. Graded Beef. Consumers' Guide, Vol. II, No. 10, March 11, 1935, pp. 8–11. Discusses the basis for U. S. meat grades. Address: Consumers' Counsel Division, Agricultural Adjustment Administration, Washington, D. C. Free.

Government Grading of Canned Fruits and Vegetables—Questions and Answers, by Paul M. Williams. June 1936, 16 pp., multigraphed. Description of Government grading dealing with such questions as methods and costs of grading, benefits to consumers, canners, warehousemen, and bankers. Address: U. S. Bureau of Agricultural Economics, Department of Agriculture, Washington, D. C. Free.

Standards of Construction and Inspection for Ladies' Full-Fashioned Hosiery. February 1936, 15 pp., illustrated. Proposed standards and definitions of terms for hosiery. Illustrates, with diagrams and microphotographs of defects, the proposed standards for construction and inspection. Address: National Association of Hosiery Manufacturers, 468 Fourth Avenue, New York, N. Y.

Services of the National Bureau of Standards to Consumers. A paper delivered before the Twenty-fifth National Conference on Weights and Measures. June 1935, 5 pp., mimeographed. An explanation of the testing procedure at the Bureau of Standards. It describes a labeling plan designed to secure for over-the-counter buyers the advantage of quality specifications similar to those used by the Government. Address: National Bureau of Standards, Washington, D. C. Free.

Certification Plan, Its Significance, Scope, and Application to Selected Federal Specifications and Commercial Standards, by Division of Codes and Specifications. Undated, 16 pp., mimeographed. This circular explains the plan devised by the Bureau of Standards whereby consumers can purchase on the basis of Federal specifications. Address: National Bureau of Standards, Washington, D. C. Free.

How Lumber Is Graded, by U. S. Forest Service. Department Circular 64. 1933, 48 pp. Gives lumber grades used by various lumber-producing associations. Address: Superintendent of Documents, Washington, D. C. 5 cents.

HOME PLANNING

Principles of Planning Small Houses, by Federal Housing Administration. Technical Bulletin No. 4. May 1936, 36 pp., illustrated. Recommends standards of construction and equipment for small houses. Illustrates the application of these standards to five residences, giving estimates of total cost of construction. Contains a brief section on plot planning. Address: Federal Housing Administration, Washington, D. C. Free.

Farmhouse Plans, by U. S. Bureau of Agricultural Engineering. Farmers' Bulletin No. 1738. 1934, revised 1935, 70 pp., illustrated. Presents material on requirements of the farmhouse from the standpoint of comfort, convenience, and appearance; suitability and cost of construction materials; working drawings and plans for different sized houses. Address: Superintendent of Documents, Washington, D. C. 10 cents.

Modern Design, by Federal Housing Administration. Technical Bulletin No. 2. March 1936, 10 pp. This pamphlet was prepared to assist Insuring Offices of FHA in evaluating applications for loans on houses of so-called "modern design." The discussion of characteristics of modern design and methods and materials of construction may be of interest to some consumers contemplating the purchase or building of a home. Address: Federal Housing Administration, Washington, D. C. Free.

Modernizing Farmhouses, by U. S. Bureau of Agricultural Engineering. Farmers' Bulletin No. 1749. 1935, 62 pp., illustrated. Lists elements of a modern farmhouse and discusses methods of installing such features as water systems, electricity, cellars, closets, and stairs. Illustrates principles of good design as applied to remodeling the exterior of a house. Address: Superintendent of Documents, Washington, D. C. 5 cents.

Convenient Kitchens, by Greta Gray, U. S. Bureau of Home Economics. Farmers' Bulletin No. 1513. 1926, 29 pp., illustrated. Discusses the selection of large equipment for the kitchen, and through diagrams illustrates the convenient arrangement of such equipment. Address: Superintendent of Documents, Washington, D. C. 5 cents.

a Tip TO EASTER EGG ARTISTS

Facts you should know before you dye

DYEING and eating bright-colored eggs is an annual ritual of fun both for adults and children during the Easter season. The old-fashioned way of dyeing eggs was to dip them in coffee or the juice from beets or onion skins. These home-made dyes were wholesome and effective, but today most families buy their Easter color in little packages at the corner store. The United States Government stands guard to see that their bright color is harmless.

Easter eggs should not only look good but their color should be safe. A child seeing a luscious purple egg cannot resist tasting it. Color often seeps through the porous shell of an egg onto the white. If there is any harmful substance, such as arsenic or lead, in the dye, as was disclosed several years ago by the activities of the inspectors of the Food and Drug Administration, in the case of some few Easter egg dyes, illness may be the result of a festive occasion.

Three years ago Food and Drug officials seized consignments of Easter egg dyes which contained poisonous ingredients and were really in the class of house paints. Today almost all Easter egg dyes that are on the market are made from harmless vegetable or harmless coal-tar dyes. Many of the latter kind are composed of dyes that have been certified for their purity by the United States Department of Agriculture.

Certified coal-tar dyes hold a unique place among foods. They are practically the only food ingredient for the purity of which the Government takes responsibility before they are added to a food. There are many different kinds of coal-tar dyes, but at the present time there are only 15 colors which are on the permitted list of dyes which may be legally added to food.

Careful tests have proved that four shades of red, one orange, five yellows, three greens, and two blues are harmless. A dye on the "permitted" list is not *per se* a certified dye. In the manufacture of batches of these dyes there must be assurance of freedom from contamination with harmful impurities. A sample from each batch of a permitted dye manufactured by a dye manufacturer must be tested by the Food and Drug Administration and pronounced free from harmful impurities before it is a certified color and only that batch is thus certified. The Food and Drug Administration will certify batches of these colors as to their purity for any dye manufacturer who desires the service.

For the right to the continued use of the statement, "certified by the Department of Agriculture", the manufacturer must send a sample of each batch of color to the Department before it is allowed to be sold. If the color meets the rigid requirements for purity, this color is given a lot number which is stated on the label of each package.

Dyes packaged for the Easter trade, although possibly obtained from a certified batch, are generally sold in such small amounts as to be impracticable for the manufacturer to go through the procedure which would entitle him to label them certified.

In addition to these artificial coal-tar colors, any harmless animal or vegetable dye may be used in foods under the same conditions, but no system of certification is in effect.

Conditions under which dyes may be used commercially to color food are provided for by the Food and Drug Administration. Harmless colors may be used in articles of food if they are not used to conceal damage or inferiority. Thus, though artificial color in wholesome foods has legitimate uses, it cannot be used, for instance, to give so-called "egg noodles" devoid of eggs a bright yellow color suggestive of eggs.

Use of artificial color added to foods, except when used for decorative purposes, requires proper label declarations. Tinted decoration for cakes and icings, however, need not be labeled as artificially colored unless the color has been added to represent an ingredient which is not present or to misrepresent the amount of that ingredient in the food.

For further information on the use of artificial color in foods, refer in your back issues of CONSUMERS' GUIDE to the articles, "Do You Buy by Color?", July 22, 1935, and "Color for Sale", April 20, 1936.

Your Food Costs

GENERAL level of retail food costs in the United States went down 0.1 percent from January 12 to February 16, but lower costs were recorded only in eastern cities. In practically all mid- and far-western cities, costs moved up. In the East the decrease in all food costs ranged from 0.5 percent in the South Atlantic States to 1.4 percent in New England. Major increases in the West occurred in the Pacific and Mountain States and averaged 2.5 percent. Advances in cost in the Middle West were minor with the exception of the East South Central States where a 1.3 percent increase was recorded.

Variation in food cost changes between areas was due primarily to different rates at which fruit and vegetable prices moved up. Prices of eggs, meats, and dairy products went down all over the country, and costs of other items advanced in practically all cities. In the East the net result was a decline in all food costs. However, in the western States, sharp advances in fruit and vegetable costs offset price declines in the above three food groups.

Disparity in rate of change between the East and far West appears to be temporary. Freezing weather in California during January practically wiped out local truck-crop supplies and damaged citrus crops. Prices immediately advanced in California and States relying primarily on it for supplies. Eastern States were not materially affected because their main source of vegetables at this period of the year is the South, where supplies are unusually large. Most of the local truck crops damaged in California were replanted, and these supplies are now available.

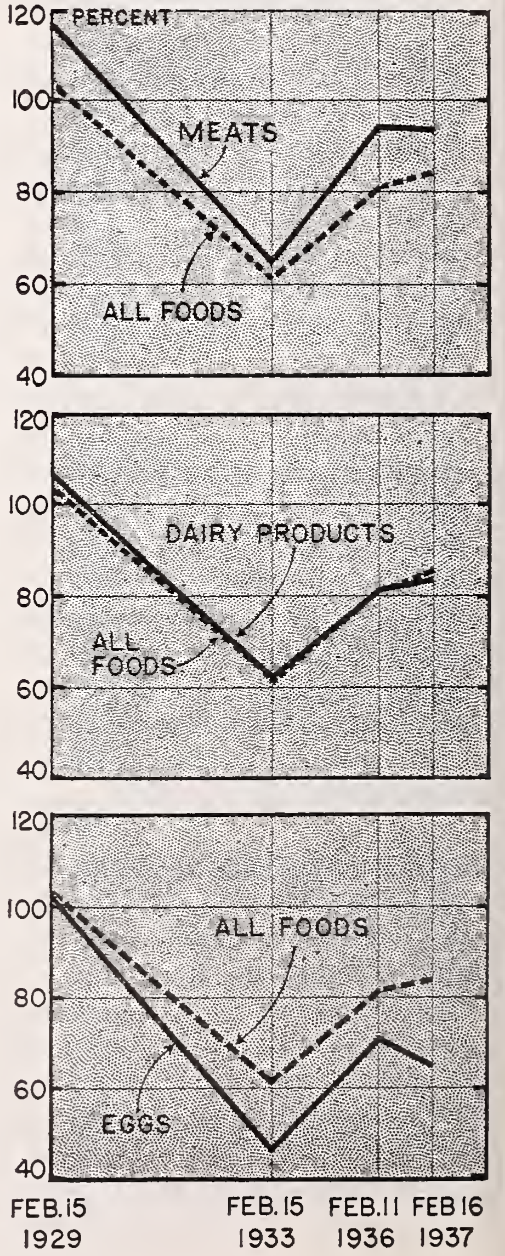
Downward movement of food costs appears to be temporary, and increases probably will occur through March. Prices of meats, potatoes, and onions, and most fruits are expected to go up. Declines in egg and butter prices most likely will be smaller than usual. The net change in costs probably will be slightly upward, with the change considerably smaller than anticipated earlier.

Index of retail food costs as reported by the Bureau of Labor Statistics on February 16 was 84.5 percent of the 1923–25 average. Compared with previous Februarys, costs were substantially below the peak index of 103.4 reached in 1930, but above the low point of 60.1 in 1933. Costs, however, were 5 percent above their level a year ago and with the exception of January 12 the highest since March 1931.

Eggs registered a 15 percent decrease in price during the 5-week period, the largest in any food group. Meats in general were 1.4 percent lower, with lower prices in practically all items except roasting chickens. Decrease in the cost of dairy products was minor, as butter prices failed to show their usual seasonal decline. All other food groups recorded price increases, but the major change was limited to fruits and vegetables. Cost of this group went up 5.4 percent with sharp advances in both fresh and dried items. Due to freeze damage in California, oranges and lemons led the upturn. Compared with a year ago, meats were 0.6 percent lower and eggs 8 percent lower. All other groups were above their 1936 level with the increase amounting to 26 percent in fruits and vegetables, 4 percent in fats and oils, 3 percent in dairy products, and 0.2 percent in cereals and bakery products.

Egg prices in early March appear to be fairly close to their low level for this year. Further price declines are expected, but these probably will be small and will occur after the Easter holiday period. Eggs start moving into cold storage during March, with peak movement in April. Storage demand, together with the increased use of eggs during the Easter holidays, most likely will prevent any material price decline in March. Egg supplies are expected to increase until peak production is reached in April. Supplies, however, probably will not be as far above last year's supplies as they were during January and February. Low point in egg prices usually is

A PERSPECTIVE OF FOOD COST CHANGES
1923~1925=100

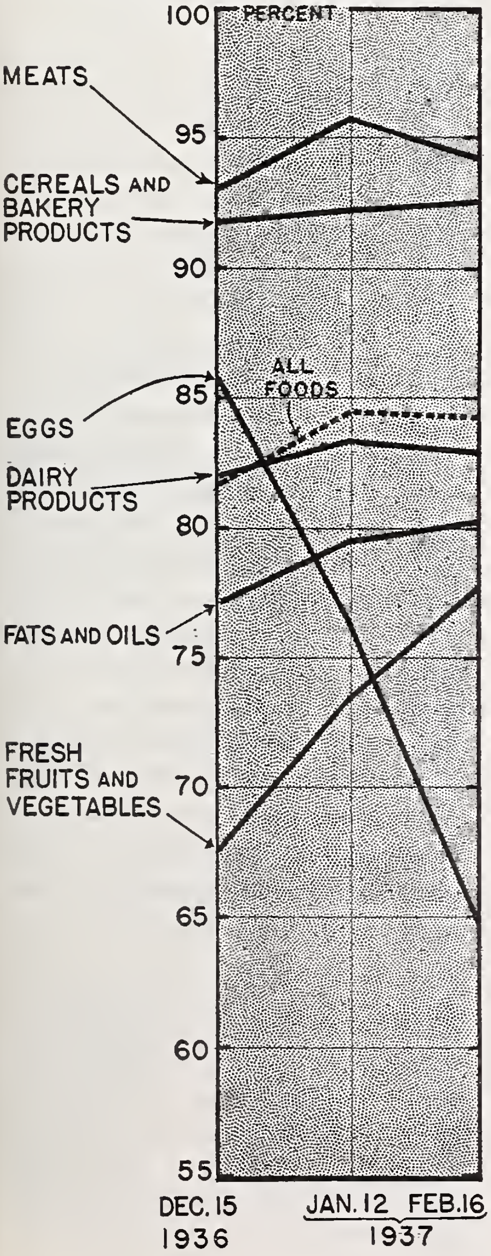


and Supplies

reached in late March or early April.

Retail egg prices declined 5.8 cents, to 33.9 cents per dozen, from January 12 to February 16. This more than seasonal decline resulted from unusually mild weather which boosted egg production per hen to a new record high. On February 16 egg prices were over 3 cents a dozen cheaper than a year ago and the lowest for this period since 1934.

A CLOSE UP OF FOOD COST CHANGES
1923~1925 =100



Higher meat prices are expected during March. Major advances probably will be limited to beef and lamb, for only slight changes are in prospect for poultry and pork. The price-raising effect of the drought on meat now is being felt. Price increases to date, however, have not been as large as expected. Larger supplies of hogs, and a decrease in meat consumption in January and February because of unusually warm winter weather, have tended to retard the upward price movement. Continuation of unusually warm weather would tend to slow up March increases.

Hog marketings are expected to decline during March and early April, but this decrease in current slaughter most likely will be offset by unusually large cold-storage holdings. Consequently, the upward trend in pork prices probably will be small. No downward trend in hog prices is in prospect until late April and May, when pigs from last fall's crop move to market in volume. Following this decline, prices are expected to move up again, with highest levels in late summer.

Fresh pork prices to consumers declined about 1.5 cents per pound during the 5-week period. Smoked items exhibited a fractional increase, and lard prices went down 0.1 cent per pound. On February 16 fresh pork items were retailing at slightly below their level in 1936, while bacon and ham, respectively, were 6 percent and 3 percent lower. Lard was 5 percent higher.

All beef cuts registered retail price declines from January 12 to February 16. Steaks went down about 0.5 cent a pound and roasts half that amount. Steaks are selling at about 2 cents a pound higher than a year ago, while roasts are up about 0.5 cent a pound. Retail beef prices are expected to continue above their 1936 level.

Lamb slaughter is expected to decline during the remainder of the grain-fed lamb marketing season, which ends on May 1. Furthermore, marketings of California spring lambs most likely will be later than usual due to unfavorable weather and feeding conditions. These lambs usually reach eastern markets in April and May. Expected larger marketings of grass-fed lambs from Texas during these months may offset the shortage caused by these delayed marketings.

Rib chops and leg of lamb were the only lamb items to exhibit a retail price decline during the 5-week period. Other items remained practically unchanged. On February 16 retail lamb prices were from 4 to 9 percent below a year ago.

Poultry prices have not shown the advances that usually occur during the first 4 months of the year. Record size cold-storage holdings have retarded price increases and have kept them at a relatively low level. Retail prices of roasting chickens moved up seasonally 0.4 cent a pound from January 12 to February 16. However, retail prices were 2 cents a pound below a year ago. Major reductions in price from a year ago have been in lightweight chickens, primarily broilers. Roasting chickens have not declined as much as other types.

Orange supplies up to the end of May are expected to be about 10 percent below a year ago because of freeze damage to California crops. Valencia oranges suffered more damage than navels. Consequently, sharper reductions in supply are in prospect after the end of May, when California Valencias are practically the only oranges available. During the next 2 months a record size Florida crop will offset part of the freeze damage to California navels. Orange prices probably will continue

[Concluded on page 22]

INTELLIGENT management spells success in cooperative enterprise, as in any other, claim cooperators. In response to cooperative demand for drilling in business principles, Kansas State College has developed a 7-week training course in consumers' cooperative management. First session was during December and January last. Courses offered were: (1) Principles of Cooperation; (2) Business Organization and Management of Cooperatives; (3) Accounting for Cooperatives; (4) Problems in Cooperative Endeavor.

MINNESOTA, too, offers management training for cooperators. A week's school for cooperative managers was sponsored at the close of last year by the University of Minnesota and the Midland Cooperative Wholesale. Many of the 80 students were managers and prospective managers of gas and oil cooperatives in that State. Instructors were drawn from the regular teaching staff of the university and from technical and educational staffs of the cooperative wholesale. Courses dealt with technical problems of oil distribution, as well as general economics and the history and philosophy of the consumers' cooperative movement.

SCORE up another bond between farm and city cooperation in the favorable vote by the members of the Farmers Union Central Exchange, Minnesota, to extend membership in their wholesale association to a city consumer cooperative. Reversing the Farmers Union traditional stand, the Central Exchange joins with other farm organizations in recognizing mutual aims of city and farm cooperatives. More than a year ago the Ohio Farm Bureau Cooperative Association voted not only to serve city cooperatives but to assist in organization of urban consumers. Next came the Farm Bureau Mutual Auto Insurance Co., of Columbus, Ohio, which extended its service in cooperative insurance to city consumers. Pennsylvania's Farm Bureau Federation likewise serves and helps in the organization of city co-ops and is supporting a bill in the Pennsylvania Legislature which will permit urban consumers to incorporate for cooperation. Consumers Cooperative Association of North Kansas City, Mo., organized in 1928 to serve rural oil cooperatives, has broadened its scope to include city cooperatives. Midland Cooperative Wholesale, Minneapolis, also serves urban consumers' organizations. . . . From its headquarters and compounding plant in St. Paul, the Farmers Union Central Exchange serves more than 230 local consumers' cooperatives in Montana, North and South Dakota. Business in 1935 totaled over $4,000,000. Early reports showed a decided increase in volume for 1936.

"A BUSINESS built entirely out of earnings" is the record of the Midland Cooperative Wholesale at Minneapolis. Started 10 years ago with no capital and no subscribed stock, Midland has become big business. Its sales in 1936 exceeded $3,000,000—23 percent more than the year before. Today it is owned and serves 163 retail cooperatives in Minnesota and Wisconsin. Trading first in petroleum products, it has expanded its line to include a dozen other commodities, including paint and radios. . . Midland cooperators credit education with much of its success. Circuit cooperative schools were held last year in 23 localities. Two 1-week youth camps were held at Chetek and Waupaca, Wis. A special cooperative institute met in Hamline University in June, and an "advanced institute" at Grand View College, Des Moines, Iowa, in May, with Midland as joint sponsor.

LATEST developments in Midland's business is a tie-up with three other cooperative wholesale associations in the Midwest to pool orders for petroleum products and take the entire output of an oil refinery in Oklahoma in 1937. Under terms negotiated with the refiner, more than one hundred 60-car trainloads of these products will be shipped to the cooperatives. Their contract calls for (1) purchase of 6,500 tank cars from the refinery; (2) control of quality and production methods under supervision of an auditor and chemist to be maintained at the plant by the cooperatives; and (3) division of profits between the refinery and participating cooperative wholesales at the end of each year of operation. Furnishing an assured market, the cooperatives expect savings in production to be possible in which they will share.

INDIANA'S Farm Bureau Cooperative Association swelled its business in 1936 by three-quarters of a million dollars, making the total come to more than $5,000,000. The wholesale cooperative supplies its 92 member cooperatives with feed, seed, fertilizer, farm machinery, paint, gas and oil, tires, and other co-op products.

THE "world's largest retail gas and oil cooperative" is claimed by the Consumers Oil Co., of Greeley, Colo. To bolster its claim it points to sales of gasoline in 1936 which amounted to almost 2,000,000 gallons. Savings to its 1,900 members on that business totaled $111,644. Patronage dividends distributed to members over the 15 years of the existence of this co-op are reported to be $864,619.

PENNSYLVANIA Farm Bureau Cooperative Association, too, reports expansion of business. Although operating only 2 years, this cooperative did a business of $511,887 in 1936, made savings of $11,714, and now records a net worth of $37,000. To build up its operating capital, the association declares its patronage dividends in the form of common stock. Five percent of the net earnings is set aside for education, 20 percent for contingent reserves. During the year the association, which serves retail cooperatives in Adams, Mercer, Chester, Clarion, Lancaster, Montgomery, Northampton, and Somerset Counties, bought a three-story building in Harrisburg to house its insurance, warehouse, and general offices. Through affiliation with other wholesale cooperative associations, the Pennsylvania association has been able to make special economies by dealing directly with sources of supply for the major commodities it handles. For petroleum products it has tied up with the United Cooperatives, Inc. (formerly the Farm Bureau Oil Co.), which is at the point of building a new blending plant at Indianapolis costing $150,000. This regional wholesale cooperative has guaranteed to erect a blending plant somewhere in the Pennsylvania cooperative's territory in 1938. Feed supply for eastern Pennsylvania now comes from the Southern States Cooperative Mills, Inc., at Baltimore, of which the Pennsylvania co-op is a member. Western Pennsylvania counties continue to receive their feed supply from the Farm Bureau Milling Co. in Chicago, of which the Pennsylvania Farm Bureau co-op is also a member. Latest development in the fertilizer business done by Pennsylvania cooperators has been the setting up of a cooperative corporation to take over a plant to manufacture fertilizer near Baltimore. Other stockholders of this new manufacturing cooperative include the Southern States Cooperative, Inc., Cooperative Farm Bureau Services, Inc. (West Virginia), and Virginia Seed Service, Inc. To supply seed, the Pennsylvania cooperative hopes to see organized in 1937 a regional seed corporation similar to United Cooperatives to handle the processing of seed for a number of the State and regional wholesales.

HEALTH problems are now being tackled by cooperatives. The Central Cooperative Wholesale at Superior, Wis., which did a $2,830,000 business in 1936, has started a Cooperative Health Association. Each member buys a $5 share of stock and for a fixed monthly fee is entitled along with his family to all ordinary medical treatment by doctors employed by the cooperative, and hospitalization in the Superior hospitals which are joining in the plan. Organizations which have endorsed the new cooperative include the Peoples Cooperative Society, Superior Federation of Labor, Douglas County Farmers Union, Workers Alliance, and the Northern Wisconsin Cooperative Federation. . . . Already operating successfully on cooperative principles are a hospital at Elk City, Okla., and a health association at Economy, Ind. . . . A Health Study Cooperative Club has recently been formed in Philadelphia. Objective of its members is to study ways of improving health through diet, exercise, and other means. One of their projects is the securing of a farm where members may produce their own foods.

Animal health problems, too, are to be taken care of cooperatively. The first veterinary cooperative in the country is being organized in Livingston County, Mich. A veterinarian will call at the farm of each member once a month to render services such as dehorning, giving feeding advice, and so on. In addition, cooperative members are entitled to two emergency calls a year and further calls at a reduced rate. Resettlement Administration and Michigan State College of Agriculture officers are giving initial aid in establishing this service.

ORGANIZATION of cooperative health associations will be given promotional aid by a new Bureau of Cooperative Medicine organized recently by the Cooperative League of the U. S. A.

CAMPUS cooperators have rolled up a membership of more than 73,000 in the colleges of the country, a recent survey discloses. Learning cooperation by practicing it, these students, organized in close to 160 collegiate institutions, run their own dormitories, cafeterias, book stores, cleaning and pressing establishments, low-cost housing enterprises, buying clubs, and twoscore other varieties of cooperative business. Clearing house of information on activities of these young cooperators is a National Committee of Student Cooperatives which serves also to promote and encourage this kind of practical education.

YOUR FOOD COSTS AND SUPPLIES

[Concluded from page 19]

higher than a year ago and register some seasonal advances. The increases, however, are not expected to be as large as the 6-cent-a-dozen jump in retail prices from January 12 to February 16. On February 16 oranges were retailing at 5 cents a dozen above a year ago and at the highest price for this date since 1929.

Grapefruit production remains at record size despite a freeze loss of 2 million boxes in California and Arizona. These States produce a small proportion of the total supply. Grapefruit shipments usually are heavy from January through April and then decline.

Supplies of most early spring vegetables are expected to remain larger than a year ago despite weather damage in California and Florida. Effect of the severe California freeze was confined mainly to the far West. In other areas large supplies from the South offset in part the reduction in California shipments. However, retail lettuce prices went up about 2 cents a head from January 12 to February 16, as California was the major source of supply. With shipments now due from Arizona, price declines are in prospect. Freeze did delay the harvesting season for most California crops and required replanting of much acreage set for spring harvest. First shipments of California asparagus have been delayed until about March 10, and the melon season is expected to be later than usual.

Onion and potato prices are expected to advance further during March. Bulk of present supplies are coming from storage, and no price declines are in prospect until new onion and potato crops move in volume. The onion outlook changed materially in February. Unusually good demand for onions, coupled with heavy shrinkage of storage stocks, offset record supplies of old-crop onions. Prices advanced sharply as a result of small supplies of good-quality onions. New-crop onions are not expected to move in volume until mid-April. Onion prices in April will depend primarily on the size of the new crop.

Retail onion and potato prices, respectively, went up 0.4 and 0.1 cent a pound from January 12 to February 16. Onion prices, however, are 0.5 cent a pound cheaper than a year ago and the lowest for this date since 1933. Potatoes are about 1.5 cents a pound above their 1936 level and the highest since 1930. No decline in potato prices is in prospect until mid-April, when new potatoes comprise the bulk of supplies. In years of short crops, such as the present, the peak in new-potato prices was reached in March, while highest point in old-potato prices occurred in April.

Study Questions for This Issue

1. Does the Federal Government supervise the making of any butter?
2. What are the powers of the Food and Drug Administration over shipments of butter?
3. What has the Bureau of Dairy Industry in the Department of Agriculture been doing to improve the quality of butter?
4. What does "92 score" butter mean?
5. Is any Government graded butter sold in your stores?
6. Does your State require all cream used in making butter to be officially graded? What are the advantages of such a law?
7. What is "process butter"? What protection to consumers is provided by the Federal Government in the making of such butter?
8. Describe a "folk school."
9. How does the New Cooperative Co. of Dillonvale, Ohio, keep the control of its business democratic?
10. Which is the mildest flavored type of onion?
11. What are the marks of good quality onions?
12. What are the three top U. S. Government grades for eggs?
13. Under U. S. Government grade definitions, how much must a dozen eggs weigh to be labeled "large", "medium", "small"?
14. Why are eggs an important food?

NO. 1 FLAVOR FOOD

[Concluded from page 12]

may still be a bargain if there is not too much waste connected with their preparation.

Prices of onions this past year and this year to date have been very low. The drought was a favorable rather than damaging condition in onion growing and the late crop was the biggest on record. Most years the retail price of onions usually goes up from November until the new crop starts coming in from the South in the spring. This year because of the record production there was only a small seasonal rise from the very low level at the start of the season up to the end of January, and consumers could buy this cheap food at even lower than usual prices. Though the coming year does not promise such bargain onions, there were still large stocks in storage at the beginning of January. But warm weather causing sprouting of the storage onions before the arrival of the early crop has tended to boost prices; they are still at this writing below the levels of a year ago.

FIVE DAYS WITH OHIO'S CONSUMERS

[Concluded from page 9]

eye view of the situation in Ohio is by no means complete. Cooperative buying groups are getting under way in Delaware, Dover, and Hiram. Encountered at Dillonvale were two visitors studying the operation of cooperatives, one from Canton where a cooperative buying club is in operation, the other from Massillon where they are expecting to start one. Youngstown and Springfield have cooperative buying groups. The Mahoning County Consumers' Council of Youngstown operates a business information service which issues a monthly report on wage and price trends. The Butler County Consumers' Council of Oxford, Ohio, tests canned goods and issues a report to members, giving the brand name of the products. In Akron, Ohio, famous for world leadership in the manufacture of automobile tires and airships, a cooperative group incorporated for business in July 1936 with a membership of 50. Five months later they had a membership of 350 and were doing a business of $2,000 per month. Promotional agency for cooperatives in Toledo, located in the northwestern section of the State, is the Consumers' Cooperative League of Toledo. Negroes of Toledo have a cooperative of their own, the Booker Washington Trade Association. A report shows that this association opened a trading post on August 21, 1936, with 100 members.

Ohio has 273 State and Federal credit unions. Pictured above is the office of one of the county Farm Bureau Credit Unions promoted by the Ohio Farm Bureau Federation.

Cooperative recreation headquarters for the Nation are located at Delaware, Ohio. The Cooperative Recreation Service, Inc., of that city is "a clearing house for worth-while, nonprofit materials, and guidance for creative leisure." It distributes collections of folk songs, instructions for folk games, information about the best sources of drama, music, craft work, and art supplies.

Credit-union statistics give at least a partial picture of another kind of cooperative activity. Credit unions in Ohio with Federal and State charters now number 273.

Problems for Ohio's consumers are by no means over. Five days with Ohio consumers do show immense organizational activity and that cooperatively they are trying to meet many of those problems.

Our Point of View

The Consumers' Guide believes that consumption is the end and purpose of production.

To that end the Consumers' Guide emphasizes the consumer's right to full and correct information on prices, quality of commodities, and on costs and efficiency of distribution. It aims to aid consumers in making wise and economical purchases by reporting changes in prices and costs of food and farm commodities. It relates these changes to developments in the agricultural and general programs of national recovery. It reports on cooperative efforts which are being made by individuals and groups of consumers to obtain the greatest possible value for their expenditures.

The producer of raw materials—the farmer—is dependent upon the consuming power of the people. Likewise, the consumer depends upon the sustained producing power of agriculture. The common interests of consumers and agriculture far outweigh diversity of interests.

While the Consumers' Guide makes public official data of the Departments of Agriculture, Labor, and Commerce, the point of view expressed in its pages does not necessarily reflect official policy but is a presentation of governmental and nongovernmental measures looking toward the advancement of consumers' interests.

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CONSUMERS' Guide

Volume IV, No. 2 March 22, 1937

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TOWARD BETTER LABOR STANDARDS

CONSUMERS' Guide

Issued every two weeks by the Consumers' Counsel, Agricultural Adjustment Administration, Department of Agriculture, Washington, D. C.

Vol. IV, No. 2 March 22, 1937

New York City's Board of Health recently came down on a fraud practiced on consumers by certain local packers of beef tongues, corned beef, hams, pork shoulders, and other cured products. The Board issued a regulation that such meats offered locally for sale must not contain a proportion of added water greater than 10 percent of the weight of the meat and must contain absolutely no pumped-in gelatin or fat. . . . Provoking this regulation was a technique for getting buyers of meat to pay handsome prices for extraneous water and other substances. All meats normally contain a considerable proportion of moisture. Research has established the close relation between the amounts of water and protein normally contained in meat. Ordinarily the water does not exceed four times the weight of the protein. Using this yardstick, the chemists of the Federal Meat Inspection Service can accurately detect the presence of added water. . . . Meats cured in salt solutions gain in weight and size. After such meats are removed from the solutions, the packer ordinarily lets his meats drain and then smokes them down to about their original weights or less. Properly cured meats should not weigh much, if any, more than they weighed before curing. . . . When abuse of the practice of pumping solutions of salt into meats appeared in the meat trade, especially in and about New York City, and use of gelatin solutions was introduced, Federal meat inspectors checked the abuse almost at its inception in federally inspected plants. Control of the U. S. Bureau of Animal Industry reaches plants selling meat from one State to another, but not plants selling only within a State. Those of the latter in New York City not subject to control by Federal authorities, carried this practice so far as to provoke complaints which led to action by New York health authorities. . . . Both local and Federal regulations as they stand today are a step toward consumer protection.

Mothtime is around the corner again. If you want to know safe, sure, economical ways of conserving winter woolens, get out your April 6, 1936, Consumers' Guide. It gives the rules. The facts are still good, with one minor change. Agriculture's Bureau of Entomology and Plant Quarantine, experts in this sort of thing, tell us that more recent researches give good ground for reducing—with safety—the number of pounds of anti-moth chemicals needed to protect a closet full of clothes. Instead of 3 or 4 pounds of naphthalene, paradichlorobenzene, or gum camphor to a closet, make the rule 1 pound to 100 cubic feet of space within the closet. In any case hang in the closet only clean woolens and be sure to seal the closet tight after you have scattered the moth-proofing material.

South Dakota's Association of University Women passes on a useful tip to consumer clubs. To encourage their library to stock up on consumer publications, they have been sending for the bulletins and books listed in our "Consumers' Bookshelf" (see pp. 16 and 17) and then turning them over to the library with a card catalog made by clipping the references from the Consumers' Guide and pasting each one on a library card. Why not give your library a hand?

From Washington State comes this consumer question: "Is there any law to prevent cull potatoes from being sold as No. 1, as is being done by stores here?" It is illegal to sell misbranded foods both in interstate commerce and within the State of Washington. The former restriction is laid down in the Federal Food and Drugs Act, the latter in State law. Potatoes labeled as No. 1 grade, which do not measure up to that standard, are misbranded. It is not enough to prove misbranding, of course, for consumers to be suspicious of their quality. The Federal Bureau of Agricultural Economics has carefully defined standards of quality for potatoes sold in interstate trade. These standards are the yardsticks which the Federal Food and Drug Administration uses in measuring the accuracy of grade labels on such potatoes. Washington State consumers who believe they have spotted a case of misbranding of this sort in the case of an interstate shipment can notify the nearest office of the Food and Drug Administration, located in the Federal Office Building, Seattle. (A complete list of such offices is given in our *Sources of Information on Consumer Education and Organization.*) If the potatoes were not sold from another State, notification can be made to the Supervisor of the Division of Foods, Feeds, Drugs, and Oils, Department of Agriculture, Olympia. . . . A big boost was given to hard-worked inspectors for the Federal Food and Drug Administration by Secretary Wallace when he commissioned, early this year, graders of the Bureau of Agricultural Economics to act as a kind of supplementary inspection force to spot any misbranding of fresh fruits and vegetables passing from State to State. Already reports of better observance of labeling requirements are reaching us. Suspected cases of misbranding of these foods can also be reported to these agents. There is a Bureau of Agricultural Economics inspector in the same building in Seattle. These men inspect only on application, and the Department charges a fee for their services.

PRODUCER GOALS AND CONSUMER GOALS

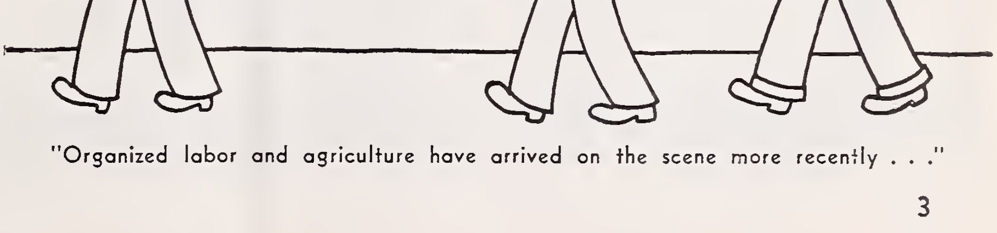
"Consumer organizations", says Secretary Henry A. Wallace, "will have to work out for themselves a clear understanding how their immediate aims differ from those of producer organizations, but also how and why they must learn to identify their ultimate aims with those of producers." In this address, recently delivered before the Consumers' Emergency Council in New York City, Secretary of Agriculture Wallace goes on to define those common ultimate aims

In a large country like the United States, the democratic will expresses itself largely through great organizations. Most Americans, therefore, believe simultaneously in corporations, labor unions, and farm organizations. They believe in these great organizations even though at one time or another each type of organization has abused its power. The corporate form of organization has made it possible for hundreds of thousands of individuals, over long periods of time, to cooperate together, to hire labor, build factories, distribute goods, and make profits. The corporate powers were obtained from government and results on the whole have been good, although the abuses have been many.

Organized labor and agriculture have arrived on the scene more recently and on the whole have been somewhat less successful in obtaining Federal power with which to determine price, wages, and production policies. Both organized agriculture and organized labor have at times, in their use of collective power granted in part by the Federal Government, shocked the general public in somewhat the same way as the corporations. It is inevitable that the different organized groups will fail at times to judge accurately as to their rights and duties. But in spite of all mistakes, the general public as a whole believes in corporations, farm organizations, and labor organizations.

What about consumer organizations? Thus far they have had very little effect on either State or Federal legislation. In young nations, and especially in times of falling prices, the producer organizations trying to get more income for farmers, for laboring men, or for business men, can make a much stronger appeal than the consumer organizations. Most of us have done much more thinking about the earning of money than the spending of money. We are producer-minded, not consumer-minded. But all of this can change very rapidly in case the cost of living should rise another 20 or 30 points.

Beginning about the year 1910 and continuing on until the Great War absorbed our attention, the consumers of the United States talked and fought a great deal about the high cost of living. "H. C. L." was a favorite term in the metropolitan newspapers of the day. The consumers were not effectively organized but instinctively they were gradually arousing themselves to battle. Unorganized consumers have a blind and passionate interest in lower prices just as unorganized producers have a blind and passionate interest in higher prices. Beginning in late 1919 and continuing until 1921,


"Organized labor and agriculture have arrived on the scene more recently . . ."

there was such a destructive and rapid fall in prices that not only were the producing groups tremendously hurt but the consumers themselves as well. Millions of women who protested against high prices in the stores, later saw their husbands or brothers or fathers suffering from unemployment, lower wages, business losses, or farm bankruptcy as a result of the price smash of 1921.

When the day finally arrives that consumer groups have bargaining power as effective as that of the producer groups, I trust the bargaining power will be used with the thought in mind that most consumers are either themselves producers or are closely affected by those who are producers. If they keep this in mind, they will not strike out in blind, passionate fury in such a way as to cause themselves in the long run more harm than good. It is easy for metropolitan newspapers of a certain type to increase their circulation and cater to a consumer resentment by printing stories which apparently are on behalf of consumers but which because of their shortsighted nature can oftentimes cause consumers within a year the most serious trouble.

". . . all of this can change very rapidly in case the cost of living should rise another 20 or 30 points."

I can state this strongly because I have seen a corresponding thing take place with respect to producer groups. It is easy to preach shortsighted goals to farmers. Many of the business magazines do the same thing as far as business is concerned. Corresponding processes take place in labor. All of this is natural and to be expected. But now that both producer and consumer organizations are becoming more representative, more powerful, and more fully equipped with State and Federal laws to back up their bargaining positions, it becomes much more necessary to think broadly than has been the case hitherto.

For consumer organizations I think this means that they will have to work out for themselves a clear understanding how their immediate aims differ from those of producer organizations, but also how and why they must learn to identify their ultimate objectives with those of producers. Although they will speak on a different front and in a different way, they must speak for producers and include them in their organizations, since everyone who contributes anything of importance to our national purposes has both a producer's stake and a consumer's stake in the outcome. I think consumer organizations will not only add to their own accomplishment but will help different producer groups to find out how they can work together if you who speak for consumers will keep this larger idea of a common national welfare foremost in your plans.

Consumers must realize that lower prices of themselves alone, unless other things also are brought to pass, will not benefit consumer welfare, because sometimes lower prices mean lower wages and less income for farmers and reduced business profits. In like manner, producers must realize that higher prices taken by themselves alone can easily bring about a situation where the increased income to the producer as producer will be more than offset by the increased cost to themselves as consumers. Suppose, for example, that business men were able to raise their prices by the process of keeping production materially less than the demand, that laboring men are able to increase their wages by cutting down very materially on the hours per week, and the farmers are able to increase their prices by reducing their production. Carried to its logical absurdity, the combined efforts of the three groups might result in a descending spiral of less and less goods produced but with more and more money received for the smaller quantity of goods. If the great producing groups were not organized into powerful bargaining units with a certain amount of control over production, wages, and price, there would be no danger of such a descending spiral.

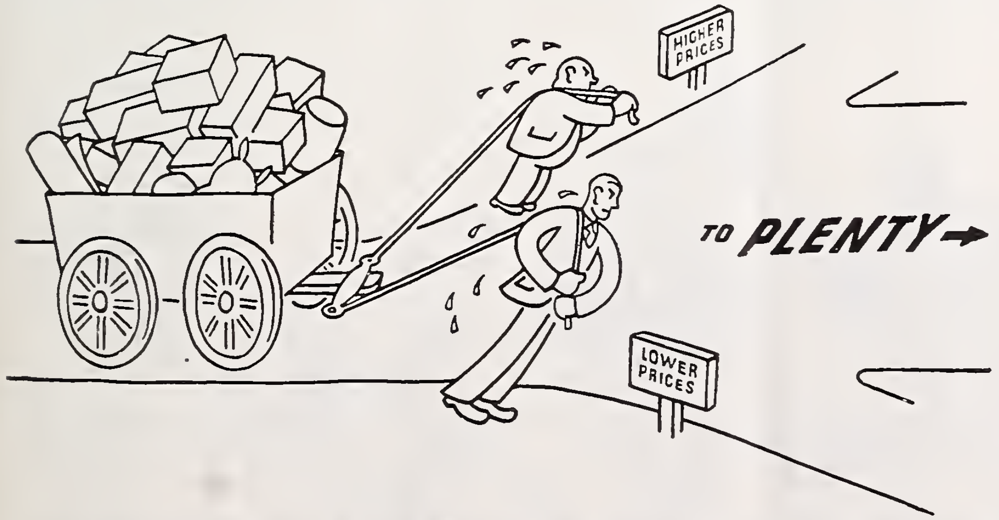
". . . there was such a destructive and rapid fall in prices that not only were the producing groups tremendously hurt but the consumers themselves as well."

But with all groups powerfully organized the only force to check the descending spiral, if these groups press their advantage selfishly, is blind consumer resentment such as we saw in 1920, or the fear of Government regulation, or such inducement to increased productivity as results from new technological methods.

It is unfortunate that business men, farmers, and laboring men, as well as consumers, should think so exclusively in terms of price and wages per hour. A tremendous advance will have been made in the national psychology when producers fully realize that higher prices will not solve their problems and when consumers realize that lower prices will not solve their problems. In passing, it should be recognized, of course, that the general price level should be as steady as possible and should promote justice between debtor and creditor. Aside from that, it is important, if we are to have an ascending spiral in terms of real wages for labor, of real prosperity for agriculture and business, to think more and more in terms of increased balanced production. It is at this point that producer goals and consumer goals become identical. Only a real increase in the total quantities of useful things produced can bring any fundamental solution of consumers' problems. And for producers this means a larger total income in terms of real purchasing power, provided the increased dollars mean more goods and jobs to be divided among us all on a basis that can be continued year after year.

The formula which seems to me best to express the united goal of producers and consumers is as follows:

We want increased balanced production of those goods which we all need and want at prices low enough to pass such increased production into consumption, but at prices high enough to keep such production coming without destruction of our natural resources or of our democratic processes. As a functional part of this formula it is obviously necessary, either by interindustrial planning by business itself, or by cooperative planning between business and Government, or by Government pressure at key spots at the right time, to bring about a sufficient distribution in the national income so that consumer purchasing power will more continuously equal producing power. Producers' goods, which tend to run ahead of consumers' goods, in times of prosperity, must not be allowed to run ahead too far. The problem of increased production is one of continuous progressive balance, not only between such producing groups as business, labor, and agriculture but also between what we produce and what we consume.



"For consumer organizations I think this means that they will have to work out for themselves a clear understanding how their immediate aims differ from those of producer organizations, but also how and why they must learn to identify their ultimate objectives with those of producers."

At the moment, the various groups are economically remarkably well balanced, although the total national productivity is not yet nearly as great as it might be and, in my opinion, can be within another year or two. There is every prospect, if we have ordinary weather and no unusual disturbance in the way of international war, that the productivity index of the United States two or three years hence will be 20 percent and possibly 30 percent greater than at the present time. If the extension of productivity is in the right kind of things, the result should be a higher standard of living for us all. Even though prices go up to some extent, we should all be better off provided the average annual income of the different producing and consuming groups will buy more goods.

The situation which we face as producers and consumers is the possibility of converting what otherwise might be either a vicious circle or a descending spiral into an ascending spiral. The ascending spiral is possible only when the producing groups achieve balance among themselves in their productive capacities and also with the consumers. There can be no conflict of opinion between truly intelligent producers and consumers who have the courage and the ability to think of their problems in the long run and not from the standpoint of short, temporary advantage. A particular group driving for a special, preferred position and borrowing the centralizing power of Government to attain that position can sometimes profit for a short period of time. But sooner or later there is inevitably a reaction which proves destructive to the very group which

"A tremendous advance will have been made when producers fully realize that higher prices will not solve their problems . . .

thought it was getting an advantage.

In very truth, the most practical kind of action both by consumers and producers is the action which conforms to the formula which I have just stated on behalf of the general welfare, the formula of increased balanced production with price, wages, consumer purchasing power, savings, taxes, governmental expenses, and all the rest appropriately adjusted from time to time to promote that increased balanced production in a safe and continuous way. I am more and more convinced that the groups which recognize a formula of this type will in the long run succeed in their policies and that those which do not recognize this type of formula will in the long run fail.

There is no magic short cut to balance. In obtaining balance the democratic process of continuous give and take is needed week by week and year by year. Each particular organized group is familiar with the technical details of its problems and knows of adjustments which must be made. If each group in the process of making the adjustments which it requires keeps in mind the formula for the general welfare, the result is certain to be a continuously happy one. But I am not suggesting that the problem is simple.

The fitting of all the economic parts together into a smoothly functioning national whole is infinitely more complex than fitting the parts of an automobile together. In the simple society of 100 years ago, when most business was conducted without corporations and when there were no labor unions or farm organizations in the modern sense of the term, the "fitting-together process" was done almost automatically without thought by anybody. But today there is continuous thought and action by the management of the different great corporations, by the leaders of union labor, and by the leaders of farm organizations. There is thought and action by the Government itself.

If these great organizations are to continue, and nearly all Americans want them to continue, it is necessary that they serve more consciously and definitely the general welfare. This must be done without abandoning the democratic process, which means that we must have infinitely more discussing and conferring than we have had in the past. Many of our leaders of organized groups in the past have taken action against the general welfare simply because the people behind them have not given sufficient thought to what was going on.

The road ahead of us is long and difficult but exceedingly promising. To travel into the land of balanced abundance, it is essential that we have more positive mechanisms for the general welfare. We must proceed democratically, but we must proceed as rapidly and efficiently as education and experience show us the way.

It seems to me that the farm program we have been developing since 1933 has been more and more pointing the way toward the kind of national program which we need. In our farm programs we have steadily tried to increase the purchasing power of farmers for industrial products and at the same time make sure that there is a sufficient supply of farm products to take care of normal consumptive needs, while at the same time the fertility of our soil was being protected. In other words, we have thought of our farm program as a part of a balanced whole. We have not wanted to get things for farmers which would lead to reprisals later on.

Most important of all, the objectives of the program have been real-

. . . and when consumers realize that lower prices will not solve their problems."

ized by means of popular representation through group action. The county farm committees point the way toward the principles of economic democracy in action. These men are elected by the farmers and interpret to the farmers in terms of action the policies which have been arrived at as a result of consideration of national and international supply and demand conditions.

To protect both farmers and consumers more effectively, I believe it is essential that there be added to the present program a more definite provision for the continuous maintenance of the ever normal granary, which looks toward a more stable supply of farm products from year to year and a more stable price from year to year. No one can foretell the weather. Therefore, both farmers and consumers require that there should be a more adequate recognition of the need for the use of the storage principle in leveling out supplies and prices.

No matter how fully the farm program is worked out, and no matter how desirous farm people may be to furnish an abundance of food to people in the cities, the final result will be imperfect unless the people in the cities are more definitely organized for continuous productive employment for all able-bodied people who want to work. It is not enough for the people in the cities to work for fair wages, fair prices, and fair trade practices. There must be in addition continuous balanced expansion of production, and in this expansion the consumer goods industries must continually keep step with the producer goods industries.

In all of this it seems to me that organized consumers can be a very real help. Organized consumers should interest themselves in more things than merely prices or to reduce the margin of the middleman. Those efforts may be useful, so far as they go, but other efforts are important, too. You have a larger, more positive obligation to yourselves and to all of us.

I am putting before you a real challenge which should be easier for you to meet than for the specialized producers who, their whole life long, have confined their attention chiefly to getting as many dollars as possible for one particular product. As consumers you necessarily think of many products, and you come from many walks of life. If you are unable to think of the problem as a whole, of the methods of bringing about increased balanced production—then who will be able to think more effectively than you about the problem of the general welfare? In you, all our economic processes finally come to rest. Your desires and your ability to buy ultimately determine the activities of all the producers. Your expressions thus far have been chaotic and oftentimes misleading, just as producer efforts have too much undergone alternating spasms of contraction and expansion.

". . . we must have infinitely more discussing and conferring than we have had in the past."

In conclusion I may say that I am convinced organized consumers will play a larger and larger part in the national scheme of things. In this talk I have not endeavored to go into the details of the problems facing organized consumers but have felt it important to impress on their minds the necessity of thinking not only about specialized consumer problems but also the desirability, if real long-time welfare for consumers is to be attained, of recognizing at all times the formula for the general welfare, which is increased balanced abundance attained in such a way that we can keep steadily on the upgrade, with the excesses of depression and prosperity minimized and centering always around an increasing production of the things which we really need and want.

"If real long-time welfare for consumers is to be attained (they must recognize) at all times the formula for the general welfare, which is increased balanced abundance centering always around an increasing production of the things which we really need and want."

WHEN FLOOD WATERS Go Down

A typical street scene in Evansville, Ind. Retreating before the rising water, flood victims look back reluctantly at their abandoned home, realizing that all their possessions will be ruined.

No epidemic of disease brought its double punishment to flood sufferers along the Ohio this year. Part of the reason was because Food and Drug inspectors were busy at their job of safeguarding public health from the sale of flood-damaged products. Directing this work is one of the important emergency jobs laid on the Food and Drug Administration

A rowboat rocked up and down in the whirling, rushing waters of one of Cincinnati's downtown flooded streets one late afternoon at the height of the Ohio River flood. A cold, raw wind was blowing. The boatman strained every muscle to battle the stiff current. He had two passengers, young men, who were attempting (with an oar) to push off pieces of houses, window sashes, tops of freight cars, counters from stores, and store fixtures floating in the water.

"Two more blocks yet", called the boatman. They had covered about three blocks already in incredibly slow time. It was beginning to get dark. An hour before, the passengers, who were Federal inspectors for the Food and Drug Administration, had arrived. They had come to help in the work of protecting the public from flood damaged food and drugs, and to keep them from being sold.

The inspectors had been deep in organization plans with Federal, State, and local health officers and city officials, mapping out a coordinating campaign for protecting Cincinnati's food supplies. There had been a telephone call. A newspaper reporter stated that he had received a tip that a certain coffee wholesaler was roasting flood-damaged coffee in an attempt to recondition and sell it.

"You can't get to that plant", local officials said when the Federal men had announced that they would look into the report themselves. "That warehouse is over on the edge of the river. No one will take you. The current is too swift." But the inspectors had persisted.

Now they had reached the plant and were moving up to the broken, open front door. They rowed through the opening in water 8 to 10 feet deep, calling loudly to attract attention. A watchman in high hip boots, waving a lantern, appeared on the stairway rising out of water more than 3 feet deep. The watchman denied that anyone else was in the plant. But the Food and Drug men insisted upon inspection. The watchman waded over to the boat and carried the inspectors on his back to the muddy and wet stairway. All three men went up the dark stairs, examining floor after floor.

On the sixth floor was what the inspectors had come to investigate—hundreds of tons of flood-soaked coffee, spread out on the floor. The owner, who was "reconditioning" the dirty coffee, was running it through a roaster—heating it just enough to dry it out.

"What are you planning to *do* with the coffee, after it's reconditioned"? the inspector asked. The man in charge had not quite decided. but he thought maybe he could export it, if he was not permitted to sell it in the United States. The inspector took a handful of the dirty coffee, put it in a glass, let it settle for a minute—and the bottom was covered with filth. "Even if that coffee was reconditioned, roasted at a safe temperature, all who drank it would be drinking coffee plus sterilized sewage", the inspector told the owner. The manufacturer agreed to dump the coffee—a total of 120 tons, worth $25,000.

Other "Government" men besides G-men battle for Uncle Sam on dangerous assignments, as such disasters prove. During the recent Ohio and Mississippi River floods Federal Food and Drug inspectors covered about 1,000 miles of river front. The flood raged from above Marietta, Ohio, to Cairo, Ill., where the Ohio rushes into the Mississippi. Vast areas were also flooded along smaller tributaries. Backwater damaged farm lands and barns filled with feed.

Spring thaws usually bring small floods to Ohio River towns. But the floods of 1937 reached heights which were unknown even in the floods of 1927—heights never before reached in Weather Bureau recordings. The last 10 or 12 feet rise of the Ohio was totally unexpected. That is why there was such a tremendous loss of stocks in wholesale establishments in the waterfront areas. Huge and small stocks which had been safely stored out of the expected reach of high water were flooded.

When flood waters go down, left behind usually are food supplies in which growers, shippers, distributors, and manufacturers have large sums invested. With flood victims to be fed, salvaging these flood-swept provisions may be tempting. Some foods, hermetically sealed, are usable. Others, exposed to the ravages of dirt, spread by flood waters, are risky or dangerous. Policing the salvage of such foods (intended for interstate shipment) is the function of the Federal Food and Drug Administration and cooperating local officials. When any flood occurs, it dispatches inspectors promptly to the damaged area.

Careful judgments must be made by these inspectors who must be fair to both those financially involved and those whose health is involved. Some freight cars which had been completely submerged during the flood at Cincinnati emerged covered with silt and slime. Floors were caked and gummy from melted sugar and flour. One car filled with dried navy beans had its door blown off. Apparently the beans had been overheated, then water-soaked. They expanded and swelled. Finally they blew the door off. A Federal Food and Drug inspector described the carloads of southern vegetables and fruits as looking remarkably fresh under their coating of mud. The consignee begged to have them salvaged by washing them in a powerful disinfectant. But they all had to go—along with tons and tons and tons of other foods. This particular train was pulled out of the city about 40 miles, closely guarded by special officers and National Guardsmen. The produce was dumped into an abandoned stone quarry and burned.

In another large city 200 solid carloads of perishable foods had to be dumped. In other cities from 200,000 to 300,000 pounds of food in warehouses had to be destroyed. In still another town, a warehouse held 150,000 bushels of wheat for milling. Still another storage plant

WPA workers helped to destroy these flood-damaged bags of sugar after they had been doused with kerosene.

In one large flooded city regular city dumps and incinerators were either flooded or taxed to capacity, so 50,000 tons of unsafe foods were hauled out to the country and burned.

had 500,000 bushels of corn on the cob ready to be processed. One manufacturing plant lost $17,000 worth of pickles in brine.

Druggists, too, took a terrific loss. A Federal official, after inspecting a drug store in West Virginia, reported to headquarters: "It is one sorry mess—a jumbled mass of the thousand and one items carried in a retail drug store—cartons, bottles, boxes, jars, all covered with slimy mud." In Louisville, 95 retail drug stores were under water. At first only the basements were flooded. Soon the streets were filled with 10 to 12 feet of water. Next, floating debris would quickly smash plate-glass windows. The force of the inrushing water would wreck soda fountains, counters, furniture, fixtures, and equipment. Medicine, drugs, medical supplies, and toilet preparations would be swept off of the shelves. In addition all of the fancy and popular stock carried by the modern drug store went along with everything else. It was complete financial loss for all of them. Wholesale druggists had huge stock losses in flooded warehouses.

While recent flood waters were still rising the Food and Drug Administration in late January sent 30 men to Cincinnati to organize their plans for condemning unfit food and drugs. The major objective was to prevent outbreaks of epidemics such as typhoid and dysentery among the general public and among the refugees. A cooperative arrangement was worked out with the United States Public Health Service whose personnel were engaged in comparable work, as well as with all other Federal, State, and local agencies.

So extremely acute was the emergency, all possible assistance in the form of manpower was necessary from nearby unaffected States. Several State Health Departments lent all their available men. The Pennsylvania State Department of Agriculture contributed inspectors, who had experienced similar problems in their State during floods the year before.

Instructions from headquarters in Washington read: "Protection of the public health demands that fresh fruit and vegetables, foods, and medicines in cardboard containers which are not hermetically sealed and which have been under floodwater, and flour and other commodities in bags shall be destroyed. The same procedure should be followed in the case of screw-top glass containers and corked bottles, since experience shows that under ordinary circumstances these products are potentially dangerous. Products in hermetically-sealed glass or tin containers may be salvaged by removing the labels and washing containers in warm soapy water. Follow the cleansing treatment by immersion in a chlorine solution or other sterilizing solution approved by the local and national health authorities. . . ."

Children were separated from their parents in the frantic, desperate effort to evacuate the entire population of many towns and villages along the Ohio and smaller streams. This little boy is waiting to be claimed. He is being cared for in a Red Cross camp.

Pocketing their instructions Food and Drug inspectors left Cincinnati to direct the work at all the river towns—Louisville, Evansville, Portsmouth, Huntington, and scores of others. Each man, like local citizens, on arriving at his station was inoculated against typhoid. Like all the local citizens he was subjected to the same hardships, trials, and inconveniences in personal living.

Inspectors arriving in Louisville,

These flood refugees are waiting to be assigned to a Red Cross camp in the fair grounds.

Schools were turned into refugee stations for homeless children in many flooded cities.

In a desperate effort to halt the rising water, again WPA workers helped by building a levee near Memphis with sand bags.

Not only homes but the industrial sections of many Ohio River cities and towns were under water. The gas house and power works at Cincinnati were inundated, cutting off gas and electric supplies.

where flood conditions were appalling, had to be quartered in a theological seminary with hundreds of other refugees. The Federal men slept on the floor on mattresses for several days—the best accommodations which could be found. They spent 2 hours a day, each morning and night, getting back and forth from their work in the heart of the city because transportation was so hazardous and difficult.

Later, when the water had receded somewhat, Food and Drug inspectors moved into a downtown hotel in order to be nearer to the flooded warehouse districts where the inspection and condemnation work had to be rushed. Hotel service meant walking up and down seven flights of stairs, carring their equipment. Elevator service was off. There was still no heat, light, or water.

All foods and medicines in stores, warehouses, freight cars, and refrigerating plants had to be inspected as the waters receded. One of the big problems was to find places to dump, cover with kerosene, and burn such vast quantities of food and drug supplies. Scavengers would invariably attempt to salvage canned goods and products in glass containers like mayonnaise, pickles, jellies, sirups, and peanut butter. Guards would have to be stationed around dumps to drive them off.

Every effort was made to impress upon the public the dangers involved. Radio and newspapers carried warnings. One statement read: "Every public-spirited citizen should consider himself or herself a committee of one to observe food and drug traffic. Where he has reason to believe questionable material is being offered for sale he should immediately call the local health officers and advise that office of his suspicion. The housewife should be particularly skeptical of any huckster endeavoring to peddle foods at a bargain price, particularly one that has not visited the neighborhood before; rather than buy from such a huckster the housewife should immediately call the local health department and advise them of the license number of the huckster's car."

Responsible storekeepers, food manufacturers, retail and wholesale food dealers cooperated splendidly with public health and food and drug authorities, despite the severity of their financial loss. Whenever it was possible, Food and Drug inspectors allowed them to recondition some of their stocks. This was permitted in the case of a shipper of large stocks of wheat. He was allowed to reclaim it and to process it for chicken feed. Before it was put on the market, however, it had been dried and denatured under strict supervision. It was also carefully inspected for sprouting and fermenting. Some 200,000 pounds of flour, only partially damaged, were permitted to be salvaged for stock feed by being mixed with charcoal.

[Concluded on page 18]

“GRADES LIKE THESE HAVE MEANING”

——quotes from a recent statement by Secretary Wallace on the value of Government grades to consumers and farmers

“There was a time when corn was corn, wheat was wheat, and hay was hay. In recent years more and more farmers have learned to talk about No. 2 corn as compared with No. 5 corn. There are Federal standards now for all principal agricultural food and feed products. The Department of Agriculture has established these standards. This provides a precise language for trading purposes. Dealers, processors, and farmers have learned to talk that language. Market information and price quotations are all geared in with these standards.

“Now it is just as important for the consumer to buy on the basis of grade as it is for the farmer to sell on the basis of grade. More and more consumers are demanding that the products they buy be labeled by Federal grade. So far, only a little progress has been made because not enough consumers have demanded it. In the case of canned fruits and vegetables, the grades are on the basis of A, B, and C and so on, with each letter standing for definite quality factors.

“Grades like these have meaning for the consumer, while such terms as ‘Extra Fancy’, ‘Special’, and ‘Superb’, so widely used, actually have little or no meaning. Of course, many thoughtless consumers buy products with such meaningless names under the illusion that ‘Super-Superb’ may be a better product than one marked ‘Superb’, when, as a matter of fact, they may be exactly the same. Thoughtless consumers are thus often led to buy a poor product, thinking that it is a good product because of the fancy name on the label. It isn’t that grade A may be superior for certain purposes to grade B or C. The idea is rather that by having a term with a specific meaning, a consumer is enabled to buy a product for what it is. Many a consumer, for instance, will find a C-grade product better suited to a particular purpose than an A grade. A consumer may prefer to buy a C-grade product because the price is enough lower to offset the smaller size, or to offset the inferior color or less desirable flavor.

“Federal grades originally grew out of marketing procedure and were based on the distributor’s interpretation of what the consumer wanted. Gradually the standards are being modified as studies are made of the qualities really most desirable from the consumer standpoint. In improving the grades, of course, it is necessary not only to know what these qualities are but how to measure them. When the grades have been set up, impartial Federal inspectors make it possible for the consumer to know what he or she is buying, even if it is in a sealed can or an eggshell; but there is still need to know more specifically what qualities are represented by each grade.

“This work of grading and standardization will be increasingly important to consumers and to farmers. I have no doubt of that. The Federal grades are based on an entirely different approach from the non-Federal and discredited market grades which were often based on the theory of moving the inferior commodity up a notch or two in the poor years. Another characteristic of the Federal grade is uniformity so far as possible over the entire country. In other words, we try to make it possible for the farmers, consumers, and dealers to speak the same language in Kansas City, Atlanta, and Chicago as in New York.

“It must be recognized, however, that this effort to bring about uniformity of standards and grades has difficulties when it comes to perishables—difficulties which I am sure will gradually be overcome. It has been found, for example, that housewives in Boston will pay a premium for green asparagus, while 40 miles away at Worcester it is said the housewives are not willing to pay any extra money for greenness. The important point here is that we should determine to what extent factors such as greenness are important and make known the facts of such researches as promptly as possible.

“Federal grades are important in protecting consumers and farmers in their buying and selling.”

CONSUMER QUESTION BOX

How many of these questions can you answer correctly? Underline the phrase which is correct; delete the others. Correct answers are found on page 19.

1. A heavy all-wool blanket (is, is not) always warmer than a light one.
2. Tomato juice is usually a (less, more) expensive source of Vitamin C than orange juice.
3. In buying sheets, look for a (high, low, balanced) thread count.
4. Consumers are (never, always, sometimes) justified in returning goods.
5. Scales used by your grocer for weighing foods are checked by (city, Federal) agents.

CONSUMER PROTECTION

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NATIONAL COAT AND SUIT INDUSTRY RECOVERY BOARD

342453

CONSUMERS' PROTECTION LABEL

BBB

Manufactured Under Fair Labor Standards

TOWARD BETTER LABOR STANDARDS

Many ingredients go into definitions of fair prices, but one essential is that the price consumers pay should provide a return to the people who produced the raw materials and the finished product, enough to keep them in the business not only of producing present supplies but of increasing those supplies. . . . Two branches of the clothing industry now tag their products in a bid for consumer help in working toward better labor standards*

FAMILY BUDGETS are notoriously stubborn. They do not expand easily and too often the amount allotted for clothes only covers the barest necessities. For a few women with large incomes, selecting a new hat or coat is an exciting indoor sport. For most of us, however, it is a nerve-wracking experience. If the hat we buy is a "mistake" and wilts in the first spring rain we are doomed to wear it whether we like it or not. But whether we are free spenders or must closely watch our pennies, consumers meet on one point: We want fair returns to go to the producers of our necessities.

Fortunes, not only of labor but of farmers, are involved in the prices we pay for most necessities. Throughout recovery, the higher prices which consumers have been paying for clothes and food have made possible bigger pay checks to the growers. AAA programs have been building up their share in consumers' dollars. Now comes part of the clothing industry with a self-directing plan to see that workers' returns are safeguarded. Out of this plan they hope not only to get better labor conditions but, through equalizing such conditions between competitors, to lay the foundations for steadier production. Steadier production, in turn, helps farmers to gage their market, workers to hold their jobs, and consumers to get fair values. It is the necessary starting point along the road to plenty.

Consumers' Protection Label, which is on the majority of hats, coats, and suits now sold throughout the United States, is the garment industry's device for getting consumers' help in building a stable clothing industry and for giving consumers assurance of fair labor conditions under which

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*More about the Consumers' Protection Label is given in "A Policy Insuring Value to the Woman Buyer and a Livelihood to Apparel Makers", Women's Bureau, United States Department of Labor. Address: Superintendent of Documents, Washington, D. C. Price, 10 cents.

A Consumers' Protection Label is stitched on every woman's or child's coat made by any firm complying with the labor and trade agreements set up under the National Coat and Suit Industry Recovery Board.

garments are made. The label is a small oblong piece of white satin bearing the seal of the National Recovery Board of the Coat and Suit Industry or of the Millinery Stabilization Commission. Usually in a coat or suit it is fastened to the left side of the article where the lining is joined to the facing. In a hat it is stitched to the lining.

Whether you buy a coat for $15 or for $150, a cheap hat or an expensive one, it will have a Consumers' Protection Label if it was made by a firm which has agreed to cooperate with both labor and other manufacturers on "fair and equitable standards of labor and commercial practice." Nine-tenths of the coat and suit manufacturers and four-fifths of the millinery concerns have agreed to support such a program. If a consumer insists on buying only Consumer Protection labeled coats, suits, and hats it means she is endorsing the cooperative efforts of an industry which is endeavoring to give her good value for her dollar without sacrificing the well-being of others. She is also indirectly encouraging the movement to stabilize and improve working conditions in other branches of the women's apparel industry such as dresses and neckwear.

Establishment of the National Coat and Suit Industry Recovery Board in July 1935 and the Millinery Stabilization Commission later in the year represent a new and fundamental effort at self-regulation by two branches of an industry which is composed of many small and different kinds of manufacturing units. The making of ready-to-wear clothes for women is the eighth largest industry in the United States. It is bracketed in importance in value of product with steel and automobiles which in 1933 were, respectively, third and fourth place. Unlike its running mates, the making of women's clothes has not followed the trend of American industry which has tended to centralize production in large plants controlled by comparatively few companies and corporations. There are many manufacturers engaged in making women's clothes who have their own establishments where garments are designed, cut, and sewn. However, the greatest percentage of the production is executed by submanufacturers or contractors after they receive their designs and orders from jobbers or wholesale agencies.

In most business the wholesaler or jobber is the middleman between the factory and the retail store at which the consumer buys. His function is to facilitate distribution. In the making of women's clothes, the jobber not only sells wholesale but he is an intrinsic part of the manufacturing process. To his establishment buyers come from all over the country. They examine his display of new styles for the coming season, which often have been designed on his own premises, and bargain for prices before placing their orders.

Receiving orders on his sample styles the jobber in the coat and suit industry buys his materials and then asks for competitive bids from submanufacturers. The contractor who offers the lowest price gets the job. Too often in the past the contractor, anxious to get the work, quoted too low a figure. If there are no regulations on wages he must pay his workers, he is free to use sweatshop labor. The initial overhead of his rented room and equipment during the peak of the season is smaller than that of a manufacturer with a permanent establishment employing workers the year around. Often manufacturers who have been unable to compete with the low price at which contractors agreed to do business have been forced to close shop or at least to give some of their work to sweatshop employers and to lay off their own men.

In 1935 out of the 1,906 firms in the coat and suit industry centered in and around New York, 924 were submanufacturers employing 24,700

A Consumers' Protection Label in the lining of a woman's or child's hat is the millinery industry's way of telling the consumer that the hat she buys was made under sanitary conditions and at standard rates of pay.

of an average of 45,500 workers. Most of these workers are employed only part of the year. During the months when production on coats is heaviest, three times as many hands are used as during the slack season. If wages are too low the most skillful budgeting will not help the worker through the period he is laid off. Employers as well as workers suffer from price-cutting wars in the industry. In the year of increasing business ended February 1935, 298 coat and suit firms closed shop in the New York area and 353 new firms entered business.

Spinning jenny catapulted the spinning of thread and yarn from the fireside to the factory. The invention of the sewing machine in 1846 had as profound an effect on the making of clothes. Up to this time, with the exception of a few fine garments imported from England and France, most clothes were made in the home by mother and daughters or by a hired seamstress. Later in the large cities the custom shop came into existence. Here women of means would go to inspect the new styles, choose their materials, and place their orders for a cloak or mantilla.

In 1849 an enterprising businessman who was also the first New York merchant to employ women in his retail sales department, introduced sewing machines into his establishment and started to manufacture women's clothing on a large scale. After the Civil War, with the rapid industrial development of the country and the building of railroads facilitating transportation, the manufacturing of women's clothing grew into a large business. Pioneers ever pushing westward offered an eager market for ready-to-wear clothing. In the cities of the East, especially New York, due to the constant influx of immigrants, labor was cheap and hungry for work. Moreover, thousands of people came to America with a long tradition of tailoring behind them and were quickly absorbed by the needle trades.

With consumer support, the coat and suit industry looks to its cooperative employer-employee agreements to lay foundations for more security for workers, a better market for producers, and better earnings for capital.

Making women's clothes became an important industry but the methods of production did not radically change from those early colonial sewing bees when mother and daughter sat together to sew a fine seam. Whole families still assembled to make fine gowns but this time not for themselves. Their work was given to them by a submanufacturer to take home or they did it in his home or in a room which he rented. Too frequently these were tenement rooms badly lighted and ventilated. In 1893 the New York State Bureau of Labor reported that there were "probably one hundred wholesale cloak houses but that not over half a dozen provide their own factories and workshops."

The report of a State factory inspector in the same year describes many of these sweatshops of which the following home of a cloakmaker, is typical: "One room for his shop, while the other three rooms were supposed to be used for domestic purposes only, his family consisting of his wife and seven children. In the room adjoining the shop, used as a kitchen, was a red-hot stove, two tables, a clothesrack, and several piles of goods. A woman was making bread on a table upon which there was a baby's stocking, scraps of cloth, several old tincans, and a small pile of unfinished garments."

Unhealthy surroundings were not the only handicaps to working in the early garment industry. At one time, for the privilege of working in the industry, they had to buy their own sewing machines, and needles and thread. Wages were exceedingly low, the hours long. Since 1880 the State of New York has

[Concluded on page 18]

CONSUMERS' BOOKSHELF

Supplementary reading for consumers interested in labor conditions leads off the tenth installment of our bibliography for students of consumer problems. Reference to any publication does not imply an endorsement of the point of view of the author or publisher by the CONSUMERS' GUIDE

CONSUMERS' INTEREST IN LABOR CONDITIONS

A Policy Insuring Value to the Woman Buyer and a Livelihood to Apparel Makers, by Bertha M. Nienburg, U. S. Women's Bureau. Bulletin No. 146. 1936. 21 pp., illustrated. Discusses conditions in the coat, suit, dress, neckwear, infants' and children's clothing, and millinery industries; points out the consumer benefits which would come from an improvement of these conditions. Outlines the part that the Consumers' Protection Label might play in such a program of improvement. Address: Superintendent of Documents, Washington, D. C. 10 cents.

Consumers' Apparel Label Guide, published occasionally by the National Label Council established to promote the Consumers' Protection Label. The subtitle of this bulletin states that it is published in the interest of women's collaboration in upholding wholesome factory and trade standards. Contains an honor roll of retail stores and a list of organizations which are cooperating with the National Label Council. Address: National Label Council, 1 Madison Avenue, New York, N. Y. Free.

An Outline of the Progress, Activities, and Plans of the National Coat and Suit Recovery Board. 1936, 7 pp. Contains a number of news articles and editorials about the activities of the National Coat and Suit Recovery Board. Address: The National Coat and Suit Industry Recovery Board, 132 West Thirty-third Street, New York, N. Y. Free.

Commercialization of the Home Through Industrial Home Work, U. S. Women's Bureau. Bulletin No. 135. 1935. 49 pp., illustrated. "Efforts to bring about the elimination of industrial home work have revealed that many people do not distinguish leisure-time production within the home for family use or for personal sale from full-time production in the home for commercial enterprises. This bulletin has been prepared to acquaint the consuming public with the undermining effects of the latter type of home work upon family life and upon standards of factory working conditions, and with its cost to the community in health and in dollars and cents." Address: Superintendent of Documents, Washington, D. C. 5 cents.

Thirty-five Years of Crusading. 1935, 12 pp. "The National Consumers' League is an educational movement founded in May 1899, to awaken consumers' interest in their responsibility for conditions under which goods are made and distributed." A brief history of the League's work. Address: National Consumers' League, 156 Fifth Avenue, New York, N. Y. Free.

Bulletin, published quarterly by the National Consumers' League. Carries information on the activities of the League. Address: National Consumers' League, 156 Fifth Avenue, New York, N. Y. 50 cents per year.

The Woman Shopper. Monthly publication of the League of Women Shoppers of New York. This organization uses consumer pressure to help organized labor achieve better working conditions. Available only to members. Address: League of Women Shoppers, 258 Fifth Avenue, New York, N. Y.

BUYING TIPS FOR GARDENERS

Vegetable Gardens

Vegetable Seeds for the Home and Market Garden, by W. W. Tracy, Sr., and D. N. Shoemaker, U. S. Bureau of Plant Industry. Farmers' Bulletin No. 1390. 1927, 16 pp., illustrated. Simple and explicit directions for those who want to save and use the seeds of garden vegetables on a small scale. Address: Superintendent of Documents, Washington, D. C. 5 cents.

Permanent Fruit and Vegetable Gardens, by W. R. Beattie, and C. P. Close, U. S. Bureau of Plant Industry. Farmers' Bulletin No. 1242. 1935, 18 pp., illustrated. Brief instructions for the planting and care of the more important small fruits and perennial vegetables, i. e., asparagus, rhubarb, horseradish, raspberries, blackberries, loganberries, dewberries, currants, gooseberries, strawberries, and grapes. Address: Superintendent of Documents, Washington, D. C. 5 cents.

The City Home Garden, by W. R. Beattie, U. S. Bureau of Plant Industry. Farmers' Bulletin No. 1044 1930, 30 pp., illustrated. Treats of the type, location, preparation, and general care of the city garden. About one-half of the pamphlet is devoted to a consideration of specific crops which might be raised.

Address: Superintendent of Documents, Washington, D. C. 5 cents.

Subsistence Farm Gardens, by W. R. Beattie, J. W. Roberts, and L. L. Harter, U. S. Bureau of Plant Industry; W. H. White, and D. L. Van Dine, U. S. Bureau of Entomology and Plant Quarantine. Farmers' Bulletin No. 1746. 1936, 54 pp., illustrated. Vegetable gardens play an important part in any subsistence-farming enterprise. Both general suggestions for starting such a garden and information about the individual crops best adapted to this work are given. Address: Superintendent of Documents, Washington, D. C. 10 cents.

The Farm Garden, by J. H. Beattie, and W. R. Beattie, U. S. Bureau of Plant Industry. Farmers' Bulletin No. 1673. 1936, 68 pp., illustrated. Pointers on gardening on a somewhat more extensive scale than can be carried on in a city garden. Considers both general methods of gardening and specific crops. Address: Superintendent of Documents, Washington, D. C. 10 cents.

Diseases and Insects of Garden Vegetables, by W. W. Gilbert, U. S. Bureau of Plant Industry; and C. H. Popenoe, U. S. Bureau of Entomology. Farmers' Bulletin No. 1371. 1934, 46 pp., illustrated. General methods of controlling garden pests. Control problems for specific vegetables, i. e., asparagus, beans, beets, chard, cabbage, celery, cucumbers, muskmelons, squashes, onions, peas, potatoes, sweet potatoes, and tomatoes. Address: Superintendent of Documents, Washington, D. C. 5 cents.

Flower Gardens

Growing Annual Flowering Plants, by L. C. Corbett and F. L. Mulford, U. S. Bureau of Plant Industry. Farmers' Bulletin No. 1171. 1929, 62 pp., illustrated. Suggests methods of starting, cultivating, and using annual flowering plants. Plants for special soil conditions are listed, and a convenient table giving the principal characteristics of annual plants is included. Address: Superintendent of Documents, Washington, D. C. 10 cents.

Rockeries, by Furman L. Mulford, U. S. Bureau of Plant Industry. Leaflet No. 90. 1932, 8 pp., profusely illustrated. Brief sections on the arrangement and selection of plants for rock and wall gardens. Address: Superintendent of Documents, Washington, D. C. 5 cents.

Herbaceous Perennials, by Furman L. Mulford, U. S. Bureau of Plant Industry. Farmers' Bulletin No. 1381. 1929, 84 pp., illustrated. Use of perennial flowers for garden borders, flower beds among shrubbery, naturalized plantings, and rock and wall gardens. Sections on culture, propagation, special uses, and an index of common names of perennials. Address: Superintendent of Documents, Washington, D. C. 10 cents.

Miscellaneous

Growing Fruit for Home Use, by H. P. Gould and George M. Darrow, U. S. Bureau of Plant Industry. Farmers' Bulletin No. 1001. 1925, 36 pp., illustrated. A general treatment of the problems of planning, preparing, the soil, planting, and maintaining the home orchard. Advice on the adaptability of various species of fruit to different sections of the country. Address: Superintendent of Documents, Washington, D. C. 5 cents.

Propagation of Trees and Shrubs, by Guy E. Yerkes, U. S. Bureau of Plant Industry. Farmers' Bulletin No. 1567. 1932, 52 pp., illustrated. Propagation of trees and shrubs by seeds, cuttings, layers, grafting, and budding. Methods best adapted to specific kinds of trees and shrubs. Address: Superintendent of Documents, Washington, D. C. 5 cents.

Transplanting Trees and Shrubs, by Furman L. Mulford, U. S. Bureau of Plant Industry. Farmers' Bulletin No. 1591. 1929, 34 pp., illustrated. Essentials for successful transplanting according to this bulletin are: A good plant, moving at the proper season, proper digging, well protected roots, an adequate hole, proper setting, suitable soil, correct planting, top pruning, and maintenance of adequate soil moisture until the plant is reestablished. Address: Superintendent of Documents, Washington, D. C. 5 cents.

Planting and Care of Lawns, by H. L. Westover and C. R. Enlow, U. S. Bureau of Plant Industry. Farmers' Bulletin No. 1677. 1935, 18 pp., illustrated. Discusses the preparation, seeding, and care of lawns. Also treats such special problems as establishing grass on slopes, grasses for special purposes, renovating old lawns, and methods of controlling pests and diseases affecting lawns. Address: Superintendent of Documents, Washington, D. C. 5 cents.

Beautifying the Farmstead, by Furman L. Mulford, U. S. Bureau of Plant Industry. Farmers' Bulletin No. 1087. 1929, 38 pp., illustrated. Illustrations and diagrams in this bulletin indicate how to apply the elements of good design in laying out plans for the farm homestead. Suggests arrangement of trees, shrubs, and other plants to beautify the grounds. Address: Superintendent of Documents, Washington, D. C. 5 cents.

CONSUMER PROTECTION

[Concluded from page 15]

struggled to eliminate the sweatshop with its insanitary and unsafe conditions. In that same year a group of workers themselves organized to better conditions. Today the workers in the women's apparel industry have a strong union which is the bargaining agency for employees and is represented on the National Coat and Suit Industry Recovery Board. Delegates representing the manufacturer, the jobber and the contractors' interests, are also on this board which discusses and regulates wages, hours, and trade practices. The National Recovery Administration helped to coordinate the activities of employers and employees in the industry. After the NRA was declared unconstitutional voluntary organizations formed to work out their mutual problems.

Establishment of the board meant bringing together 2,200 members of an industry and representatives of 20,000 women and over 30,000 men employees in a cooperative effort to eliminate unfair trade practices and to better labor conditions in the coat and suit industry. The forming of the Millinery Stabilization Commission meant the bringing together of over 1,100 firms and representatives of over 25,000 employees in the millinery industry.

Knotty problems such as the relationship between jobber and contractor are regulated by these industry boards. Hours, wages, and other standards of working conditions to enable employers to stay in business and workers to earn a living wage are agreed upon. These two branches of the women's apparel industry tell the consumer of their achievement by sewing into her coat or hat the Consumers' Protection Label.

If this label could talk it would undoubtedly say to the wearer: "In spite of your capriciousness, your love of variety, I am endeavoring to give you as good a value for your dollar as a man gets when he buys a suit." The standardization of men's clothes makes it simpler to gage the yearly demand and to produce them economically and efficiently, thus cutting the cost to the consumer. A woman's prerogative to change her mind has a great deal to do with the hazards involved for those engaged in making her clothes. Experts say that women insist on a great variety of styles each season to choose from and that they can not safely predict what style dress, coat, or hat will be the season's best seller.

When Paris and New York designers say long sweeping skirts will be chic for street wear, jobbers display them in their showrooms, but manufacturers do not produce swirling dresses in quantity until retail stores have shown the advanced styles and sent word, via orders to jobbers and manufacturers, on the popular choice.

Constant seasonal changes in style are deeply felt by the worker. The demand in the fall for tailored felt hats means that almost half the workers who were busy in the early spring trimming and sewing straw hats are laid off. Today the minimum scale of wages which is set up for each craft in the millinery trade by the Millinery Stabilization Commission endeavors to make up to some extent for the irregularity of employment.

Whether the Consumers' Protection Label will be adopted by the dress, neckwear, and other branches of the women's apparel industry depends on the women consumers throughout the country. Demand for Consumers' Protection Label goods will undoubtedly stimulate mutual employee-employer agreements in other branches of needlework trade. Furthermore, if women buy only hats, suits, and coats which have this guarantee that they were made under favorable working conditions, the recalcitrant one-tenth of the coat industry and the one-fifth of the millinery industry may find it to their advantage to sign up.

Women's clubs throughout the country who believe that consumer purchasing power should stand firmly behind better standards and stabilized industry are publicizing the label and the cooperative agreement in back of it.

WHEN FLOOD WATERS GO DOWN

[Concluded from page 11]

A pickle manufacturer, on the other hand, was not allowed to keep his stock of pickles, which had been in open tanks. The pickles, contended the distressed manufacturer, were in salt brine, heavy enough to prevent any contamination or adulteration. But Food and Drug inspectors were obdurate in their insistence that they be destroyed.

It was hard for Food and Drug men to order the wholesale destruction of stocks which appeared only slightly damaged. But they knew that polluted floodwaters had contaminated them with filth and that they were potentially dangerous.

The Ohio and Mississippi floods are now over. The clean-up job is progressing rapidly. Life is becoming normal in flood cities, except for hundreds of workers, business men, merchants, and farmers who lost everything. Thousands of refugees are still living in Red Cross refugee camps, waiting for their homes to be rebuilt or repaired. But there has been no outbreak of disease. Thirty hard-working Food and Drug Administration men helped to prevent that disaster by accepting the heavy responsibility of guarding food and drug supplies along the 1,000-mile flood front danger zone.

STUDY QUESTIONS FOR THIS ISSUE

1. What is the normal proportion of water to protein in meat?
2. How did New York City's Board of Health attack the abuse of the practice of pumping solutions of salt into meat?
3. To what two Federal agencies can cases of misbranding of fresh fruits and vegetables, shipped in interstate commerce, be reported?
4. How can lower prices in themselves injure consumers?
5. How can higher prices by themselves injure producers?
6. What formula does Secretary Wallace suggest for the fundamental solution of consumers' problems?
7. What challenge does he put to organized consumers?
8. What Federal agency has power to condemn flood-damaged foods?
9. Why are such foods destroyed?
10. Are there any advantages to consumers in the A-B-C type of grade labeling on food products? Are there any disadvantages?
11. What branches of the clothing industry use the "Consumers' Protection Label"? What percentages of manufacturers in each are cooperating in the use of this label?
12. What does this label mean?
13. What different economic groups can benefit from steady production? How?
14. How are these clothing trades trying to get steady production?
15. Bearing in mind the formula suggested by Secretary Wallace, what additional objectives should the clothing industry have in order to meet consumer objectives?

ANSWERS
to the Consumer Question Box, page 12

1. Is not.
2. Less.
3. High.
4. Sometimes.
5. City.

Our Point of View

The CONSUMERS' GUIDE believes that consumption is the end and purpose of production

To that end the Consumers' Guide emphasizes the consumer's right to full and correct information on prices, quality of commodities, and on costs and efficiency of distribution. It aims to aid consumers in making wise and economical purchases by reporting changes in prices and costs of food and farm commodities. It relates these changes to developments in the agricultural and general programs of national recovery. It reports on cooperative efforts which are being made by individuals and groups of consumers to obtain the greatest possible value for their expenditures.

The producer of raw materials—the farmer—is dependent upon the consuming power of the people. Likewise, the consumer depends upon the sustained producing power of agriculture. The common interests of consumers and of agriculture far outweigh diversity of interests.

While the Consumers' Guide makes public official data of the Departments of Agriculture, Labor, and Commerce, the point of view expressed in its pages does not necessarily reflect official policy but is a presentation of governmental and nongovernmental measures looking toward the advancement of consumers' interests.

DON'T FORGET

to fill out and return the post-card blank we have mailed you if you wish your name retained on our mailing lists. These lists are being revised now. We must drop from them the names of all subscribers who fail to notify us of their desire to have their names retained. If you wish your subscription continued, you must return the filled-out blank *within 30 days of the date you received it.*

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CONSUMERS' Guide

Volume IV, No. 3 April 5, 1937

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PARTMENT OF AG

FINANCING CONSUMERS COOPERATIVELY

CONSUMERS' Guide

Issued every two weeks by the Consumers' Counsel, Agricultural Adjustment Administration, Department of Agriculture, Washington, D. C.

Vol. IV, No. 3 April 5, 1937

One type of protection which consumers of bread might work for, we suggest on page 14, is getting bakers to date their bread. That consumer demand for this practice already exists is borne out by a survey reported on in a recent issue of a bakery trade paper. Some middle-western college students asked approximately 1,000 housewives 10 questions about bread. To one of these questions, "Would you like the bread wrapper dated?", 746 housewives answered "Yes", 196 "No." . . . Close to 30 percent of the people answering the question, "Have you any criticism of bakers' bread generally?", said "Yes." "Most common criticism of bakers' products of all kinds", the report goes on to state, "was indicated by the feeling that the products do not have the best ingredients." To remedy this feeling, the report suggests, "probably the major job in advertising and selling is to stress the high quality of ingredients—a quality of ingredients not merely as good as those used in the home but better." As an alternative remedy, perhaps bakers might try showing on their wrappers the actual kind and amount of each ingredient in their loaves, and then mark consumer reaction to quality.

A statement which appeared in a recent issue of a bakers' trade paper: "The Associated Bakers of California revised wholesale prices of bread and rolls upward on February 21, with higher prices on hearth bread effective March 1. Wholesale bakers are not to solicit the trade of competitors for 30 days and in the case of hearth bread not for 60 days. Prices for pies, cakes, cookies, doughnuts, and coffee cakes are being adjusted but have not been definitely settled. Retail bakers have made a general raise of 15 percent on all their products." This little item, obscurely published, will recall to some of our readers the inquiry made by AAA's Consumers' Counsel into a threatened Nation-wide bread price increase in October 1935. At that time bakers' associations in various parts of the country were reported to be meeting to agree on higher prices to consumers. In a widely published statement to the Consumers' Counsel, the president of the American Bakers' Association stated: "The price of bread is a completely localized matter subject to widely varying factors."

Consumer-retailer collaboration continues to hold the center of interest of leaders in the National Retail Dry Goods Association which is attempting to form a Consumer Relations Committee on which the trade and consumer organizations would be represented. In writing to the trade, the chairman of this association's committee on merchandise standards argues: "No one connected with retailing or manufacturing should, and I do not know that any do, view the consumer-relations movement as an ill-conceived plan by which business secrets will be divulged to the public, which heretofore have always been sacred to business itself. On the contrary, the whole program of the consumer-relations committee simply represents an awakening to the idea that for the best interests of industry as well as the consumer, there must be some form of practical cooperation between the two, if business, and especially retailing, is to do a merchandising job in keeping with the times. . . . For a generation the retailer has claimed to be the agent for the consumer. Up to now, the consumer has actually had little to say as to that appointment, and certainly has had no part in the consideration of problems many of which to the consumer are fundamental. . . . With the consumer-relations program functioning, the retailer will become in fact as well as word 'the agent for the consumer.' The job that I see must be done by the retailer, in response to the consumer demand for actual representation in merchandising and promotion, I developed in my address. . . . This, briefly, is to learn from the consumers themselves just what they want."

Two new consumer news sheets have come our way from New England. One, started on March 10, is issued by the Connecticut Consumers' Information Service, State Office Building, Hartford. Its first release reports on a recent test of grass seed by the State Department of Agriculture and offers consumers a list of companies whose products come nearest to measuring up to the claims on the label. This service, sponsored by the State Department of Agriculture, cooperates with an important list of organizations. Among them are the Federation of Women's Clubs, League of Women Voters, Congress of Parents and Teachers, Home Economics Association, State Grange, the Woman's Christian Temperance Union, and the Council of Congregational Christian Women—all of Connecticut.

Worcester County Consumers' Institute, Worcester, Mass., puts out a monthly news letter to consumers from its headquarters in the Y. W. C. A. building in that city. Recent issues told what the Federal Food and Drug Administration did in 1936, discussed State and national legislation, answered some consumer questions about eggs.

Membership in a credit union is limited to people who have a common bond of association or occupation. This is a group of employees of the Department of Agriculture who are making their weekly installment purchase of stock in their own credit union.

FINANCING CONSUMERS COOPERATIVELY

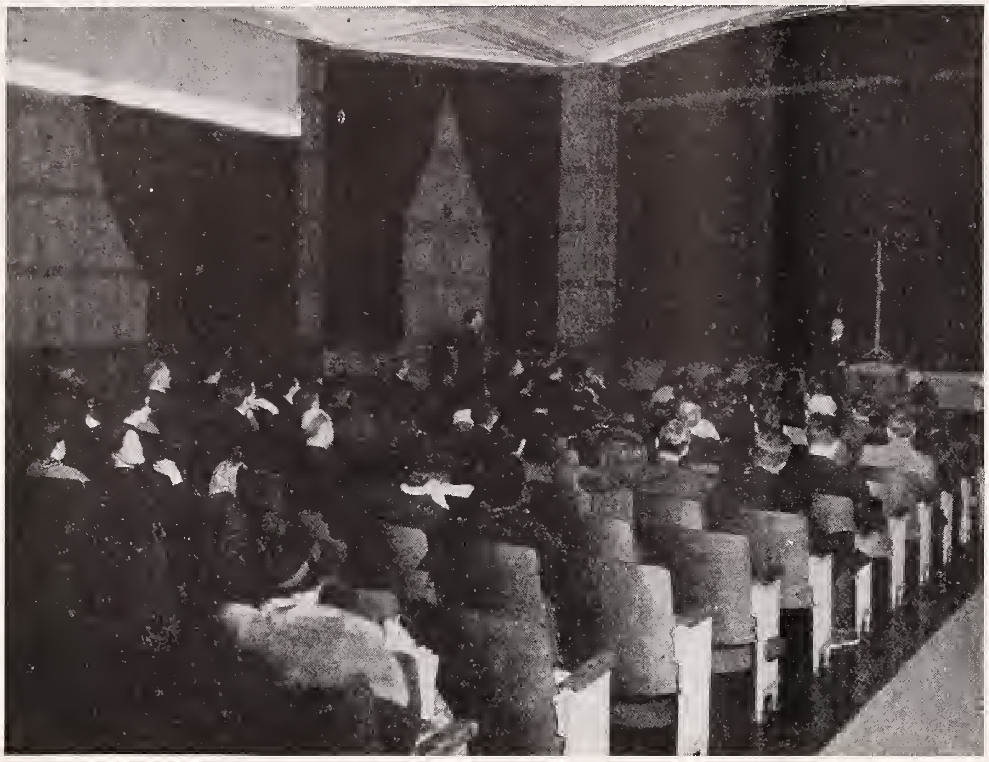
More than a quarter-million consumers, in cities and rural places, now use Federal Credit Unions as a source of cooperative credit to build up their purchasing power

Visions of great pillared buildings, marble floors, a wealthy board of directors—such badges of solidity may come to mind when one thinks of banks. Not as pretentious, but just as solid and well-managed are the 5,000 and more credit unions in this country—banks that are owned and operated cooperatively by consumers.

Consumers in this country have been applying the cooperative principle to the problems of banking ever since 1909, when the first credit union was established in New Hampshire. Slowly this movement grew until in 1934 it gained the recognition of the Federal Government when Congress passed the Federal Credit Union law. Since then the movement has leaped ahead at the rate of nearly 100 new credit unions a month. Their cash resources are approximately 100 million dollars.

Time was when consumers could inch along without borrowing money. Families then were more nearly self-sufficient. The pioneer family raised its own food, made its clothing, and from logs hewed its home. Little cash was needed for necessities. Times are different today. Rewards of labor come in cash, not goods, for most of us. Necessities of life are more complex. Many of them involve large cash outlays. To buy an automobile a worker's family must have time to pay or money saved up. Depressions work havoc on family pocketbooks. Even in good times, emergencies, overburdening the cash resources of families, sometimes strike hard.

Financing consumers to buy goods or lending money for emergencies is a big twentieth century business. Two types of business enterprise have developed to meet the needs of consumers. One group extends cash credit; that is, loans of money direct to the consumer. This group includes commercial, savings, and industrial banks; remedial loan societies; personal finance companies; and unlicensed lenders. Another group extends merchandise credit; that is, loans to the seller of the



A credit union is a cooperative business of the members, by the members, and for the members they are to serve. Government workers are meeting here to discuss the principles of cooperative credit before setting up their credit union.

goods. Companies of this group finance the purchase of automobiles, radios, and other goods making it possible for consumers to buy "on time."

Credit unions belong to the first group of enterprises. They are "baby banks" which provide credit to persons of small means. They are cooperative businesses, of the members, by the members, and for the members they are to serve. Because loans are made only for useful purposes, because they are made with great care and watched over by those who make them, and because the cost of doing business is cut to the bone, credit through credit unions comes relatively cheap.

Since credit unions are banks, they are subject to Federal and State regulations just as are other banks. Before a consumer group can organize a credit union it first secures the permission of the State or Federal Government to go into the banking business. Forty-one States, the District of Columbia, and the Federal Government have passed credit union laws, and issue charters for credit unions. Credit unions may be organized under Federal or State laws.

Chartering and supervision of Federal Credit Unions is entrusted to the Farm Credit Administration. There is no necessary connection, however, between farm credit and credit unions. In fact more credit unions have been organized by city than by rural groups. There are about 2,000 credit unions with Federal charters. All other credit unions, approximately 3,500, operate under State laws.

Membership in a credit union, whether Federal or State, is limited to people who have a common bond of association or occupation. Organized credit unions include the employees of business firms, teachers, students, employees of Federal, State, or city Governments, housewives or other community groups, members of a church, a fraternal organization, a cooperative. About two-thirds of all Federal Credit Unions have been organized by the employees of business enterprises.

Any seven or more people having in common some occupational or other association can organize a Federal Credit Union. The group, however, should have a potential membership of at least 80, otherwise it is unlikely that the credit union will gain a sufficiently large membership to be practical. Experience shows that approximately 80 percent of the potential membership will join eventually.

Members control and manage the credit union. If the union is organized around a business firm, it is of vital importance that the management adopt a hands-off policy. The record of 25 years of experience shows that credit unions can manage their own affairs. General direction and control of each credit union is entrusted to a board of directors consisting of not less than five members. A credit committee, usually three members, approves all applications for loans, and a supervisory committee, usually three members, periodically examines and audits the books of the credit union. The directors and committee members are elected at the annual meeting. Each member of the credit union has one vote.

Directors in turn elect officers—a president, a vice president, a treasurer, and a clerk. Oftentimes the positions of clerk and treasurer are combined into one—clerk-treasurer. The treasurer or the clerk-treasurer is the general manager of the credit union. His work is made easier by the use of standardized accounting forms. The candidate does not have to be a trained bookkeeper, but he should be willing to give much of his time and effort to the credit union. If the credit union is large, the general manager is frequently paid a small salary.

Membership application in a credit union must be made in writing to the board of directors. The application must include the endorsement of one director indicating that in his opinion the prospective member is industrious and trustworthy. The application is then voted upon by the board of directors. If approved by a majority of the directors, the applicant becomes a member on payment of a 25-cent entrance fee, and has subscribed for and paid the first installment on one share of credit union stock.

Encouragement to save is given every member. In fact, it is the primary object of credit unions. The loan feature merely provides a safe investment whereby the members themselves get the profits. A member accumulates savings in a credit union by purchasing shares of stock. Under the Federal Credit Union law shares are valued at $5, and can be bought and paid for on the installment basis. Payments on shares run as low as 25 cents a pay day. A member draws out savings by selling his shares back to the credit union.

Members in good standing are eligible for loans. Loans are made only for useful or "provident" purposes. Such a purpose is regarded as one which would be of service to the member borrower or his family—to buy furniture, clothing, coal, or for general living expenses; to pay taxes, insurance, doctor bills, tuition fees, moving bills, or to consolidate small debts.

Applications for loans are made on forms provided by the credit union. Applications state the purpose for which the money will be used. The credit committee passes on all requests. A loan is granted after this committee has made certain that the prospective borrower is a member in good standing, that the loan is for a legitimate purpose and that the borrower is not behind in any credit union payments. If the person applying for a loan is a chronic borrower or appears to be a poor money manager, frequently the credit committee offers to help the member straighten out his financial affairs, set him on his feet.

Top limits on the amounts of individual loans, secured or unsecured, are set for Federal credit unions in the Federal act. Under these provisions, loans up to $50 can be made to members without security, loans over this amount and up to $200 require security. Two hundred dollars or one-tenth of the total paid-in capital of a credit union—whichever is larger—is the maximum loan any member may be given by a Federal credit union. The limit can be set lower than this, of course, if the union itself wishes. Indeed, Farm Credit officials advise budding credit unions, whose paid-in capital has not yet reached $2,000, to fix lower limits on loans.

Headquarters of the Farm Credit Administration in Washington, D. C.

Supervising all Federal credit unions is the Farm Credit Administration in Washington, which reports the organization of 1,674 such unions in the first 2 years of operation under the Federal Credit Union Act.

Adequate security for a loan may be an assignment of shares owned by the borrowing member, the endorsement of a note by another member of the credit union who promises to pay in case the borrower defaults, or a chattel mortgage on furniture, automobiles, or other personal property owned by the borrower.

Each credit union fixes its own rate of interest on loans. According to the Federal law, this rate cannot be more than 1 percent a month on the unpaid balance of the loan. One percent a month is the rate generally charged. No other charges are permitted. Just why credit unions have grown so rapidly is easily seen when this interest rate of 1 percent a month, or 12 percent per year, is compared to the interest rates of commercial agencies which lend money. Seventeen percent is the lowest annual interest rate charged by any of them. Thirty-six percent is much more common, and unlicensed lenders of the "loan shark" type may collect as much as 480 percent.

Borrowers repay loans in monthly installments or according to any other schedule agreed to. Loans are made for periods of from 1 week to 2 years. Loans can be repaid more rapidly than agreed upon. Since interest is charged only on the unpaid balance of the loan, it is to the borrower's advantage to repay loans as quickly as possible. Under the Federal credit union plan, a $100 loan paid back in 10 months, $10 a month, would cost the borrower not more than $5.50. If paid back in 12 monthly installments the maximum cost would be $6.50. Fines may be imposed when borrowers fail to pay an installment on a loan that is due. The fine generally amounts to one cent for each $2 overdue. In certain instances the board of directors may excuse the delinquent borrower. As a matter of fact few credit unions ever impose fines. If the installment remains unpaid for 3 months, the board of directors takes steps to collect the loan.

Earnings from loan operations may be returned to the members in the form of dividends on shares owned. Dividends are voted by the members, and the usual rate is 6 percent a year. This is a very favorable record in view of interest rates paid by other consumer saving agencies, as low as 2 percent. Before dividends are paid 20 percent of the net earnings must be set aside as a reserve against bad loans. After the credit union has built up a sizeable reserve account, the 20 percent can be lowered.

Bad loans seldom appear on the records of credit unions. Federal credit unions, during the 2 years from October 1, 1934, to September 30, 1936, loaned a total of almost $13,000,000, and had charged off as losses at the end of that period only $1,070. That represented a loss of only $1 for every $13,000 loaned. Records of credit unions operating under State laws show a similar low rate of bad loans. There are very few instances of a credit union going to the wall.

Funds of the Federal credit union are deposited in national banks, State banks, trust companies, or mutual savings banks. At its first meeting the board of directors designates the bank to be used. This bank must be insured by the Federal Deposit Insurance Corporation. Directors may invest surplus funds, left after expenses and dividends are paid and the 20 percent reserve set aside, in obligations of the Federal Government or in securities fully guaranteed by the Federal Government.

Credit unions, while they may solve the credit problems for many consumers, have one major disadvantage. Loans are made only to members and not to the public at large. Many people in the country do not belong to groups large enough to support a credit union. Membership in credit unions, however, is growing at the rate of 8,000 a week or 400,000 a year. Between 50 and 100 new credit unions are organized each month.

Their resistance to failure, however, is one of their strongest attractions to consumers with small, and often precarious, incomes. During the depression years when banks found collections extremely difficult, the average losses for all credit unions in this country were less than one-tenth of 1 percent. In the years of 1934 and 1935, the State of Illinois unions had an average of losses of four-hundredths of 1 percent. Credit unions have proved that the average small borrower is a good credit risk; that he pays his loans and pays them on time.

WHEN CONSUMERS BANK FOR THEMSELVES

A two-year record

The first Federal credit union was organized on October 1, 1934. Two years later, on September 30, 1936, Federal credit unions had rung up this record:

Number of credit unions	1,674
Number of members	252,176
Paid-in capital	$6,448,815
Number of loans made to members	201,768
Value of loans (2 years)	$12,992,880
Loans outstanding, September 30, 1936	$5,511,398
Transferred to reserves (for bad loans)	$85,134
Losses charged off	$1,070

BACKYARD GARDENS

Where pennies count and well-balanced diets are difficult to get, backyard gardens may be a solution. . . . But before deciding whether to grow or not to grow your own vegetables, costs should be stacked against advantages

Well-planned backyard gardens can add to the family's vegetable supply.

VEGETABLES each day may not keep the doctor away, but the lack of them might bring the doctor calling. Bodies, big and little, need their vitamins and minerals, and vegetables are one of the best sources. Every diet for young and old should include its quota of garden products.

How to get the quota they need is a problem for many families with pinched pockets. For most, the corner grocery or market with its stocks of commercially produced vegetables will usually be the more economical source of supplies. For others who cannot stretch the family purse to cover purchases of adequate supplies from this source, a patch of backyard may be the cheaper route to a better diet. Where cultivating the backyard means the difference between doing without and having these essential foods, it's a wise gardener who plans carefully in advance.

A family of five, according to estimates of the Bureau of Home Economics of the Department of Agriculture, consisting of two moderately active adults, two boys aged about 9 and 14, and a girl aged about 12, can have an adequate diet at a minimum cost, if its weekly market order includes—besides a specified amount of milk, eggs, meat, cereals, fats, and sugars—14 pounds of potatoes, 5 pounds of tomatoes and citrus fruits, 9 pounds of leafy, green, and yellow vegetables, 2½ pounds of dried beans and peas, peanut butter and nuts, 2 pounds of dried fruits, and 10 pounds of other vegetables and fruits.

One-fourth of an acre or thereabouts is necessary to supply these vegetable needs. City backyards are seldom more than 30 by 60 feet, most of them are much smaller, but careful planning and a selection of vegetables that yield a large crop on a small space can be made to act as a leaven on the family budget, especially during the summer months.

Many vegetables are easy to cultivate and will grow as well under amateur as under professional attention. If weeds flourish in a backyard, then rows of lettuce, beans, and radishes will, too, for healthy weeds are an indication that the soil is good and with a little preparation can be turned into the family's salad bowl.

Initial investment for a backyard garden is small. A spade or spading fork, a hoe, a steel rake, and line with two stakes fastened to it are all the equipment that is really needed. The amount of fertilizer required is dependent upon the natural condition of the soil. If the garden is about 30 by 60 feet, about a ton of stable manure can be spaded into the soil each year. But if the soil has never been worked before and is especially heavy and wanting in organic matter, then a larger amount of fertilizer may be needed at the beginning. In cities where the manure supply is limited and difficult to secure, commercial fertilizers may be used at the rate of 3 to 5 pounds to each 100 square feet. A high-grade garden fertilizer having a guaranteed analysis of 5 percent nitrogen, 10 percent phosphorus, and 6 percent potash will give good results. A combination of manure and commercial fertilizer usually gives best results.

Seeds are a comparatively small but important item. A 5-cent packet of lettuce seed will supply needs of this family of five. Economizing on the quality of seeds is poor business. Buy good seed. Certain diseases are carried in seeds. Best results will come from using those bred and selected for disease resistance. Therefore, read the labels and buy seeds put out by reliable firms. Seeds should not be wastefully planted, for the surplus may be used another season. Many vegetable seeds will keep from 4 to 6 years. It is best to keep them in a ventilated tin or glass container to protect them from mice. They should also be stored in a reasonably dry room.

Small gardens that are to furnish food for the dinner table require headwork as well as exercise. It is wise to draw a ground plan of the garden and face the problem of space before investing in packets of seeds with attractive pictures of blue-ribbon ears of corn and heads of cabbages. To have a continuous supply of vegetables over the summer, one should carefully consider his crop rotation.

Lettuce, radishes, spinach, bush beans, carrots, and beets are among the vegetables which can be planted twice in a season. After the first crop of spinach and lettuce, late cabbage can be grown in the same ground. A second planting of lettuce may succeed the first planting of bush beans. Likewise when the early cabbage has matured, beets and carrots may take its place in the garden.

If the garden is to furnish a portion of the daily meal, the amateur gardener should curb his natural love of experimenting and become skilled in growing a few kinds of vegetables. The size of the garden as well as the family's favorites should dictate the selection of vegetables to be grown. As a rule, not more than 10 or 12 kinds should be attempted.

Beans are an important choice for any amateur gardener who wants bounty from small space. The many varieties of bush and pole or climbing lima beans are high in food value and will flourish under a wide range of conditions. Pole or climbing lima beans can be grown on a fence or trellis covering the kitchen porch, or garage. Rows of snap beans or string beans may be planted in a garden at intervals of 2 or 3 weeks, thus providing a continuous supply over the summer months. In sections of the country where the first frost does not occur till October, bush beans may be planted as late as August 1. If the crop is bountiful, the surplus is easily canned for the winter . . . or if allowed to ripen and dry may be used for cooking in various ways. Colored dry beans rate as high in food values and flavor as white dry beans, which to date seem to have the popular vote. Another use for beans which have become too old for immediate use is to ripen and dry them for next season's seed supply.

Lettuce, basic ingredient of most salads, is well adapted to a backyard garden, as a small space will give a generous yield. Lettuce needs a very rich soil and plenty of moisture. It will grow well in a portion of the yard which is shaded part of the day, and in most sections of the country may be planted twice, in the spring and again in August. It is not easily injured by a light frost, but is very sensitive to heat. To grow head lettuce in many sections of the country it is necessary to start the plants in a hot bed or cold frame and then transplant them early in the spring. May King, Unrivaled, Big Boston, New York, and Iceberg are fine varieties for head lettuce. Early Curled Simpson and Grand Rapids are two good loose-leaf varieties.

Half ounce of seed of Swiss chard

Lima beans will grow well on a trellis or on a fence.

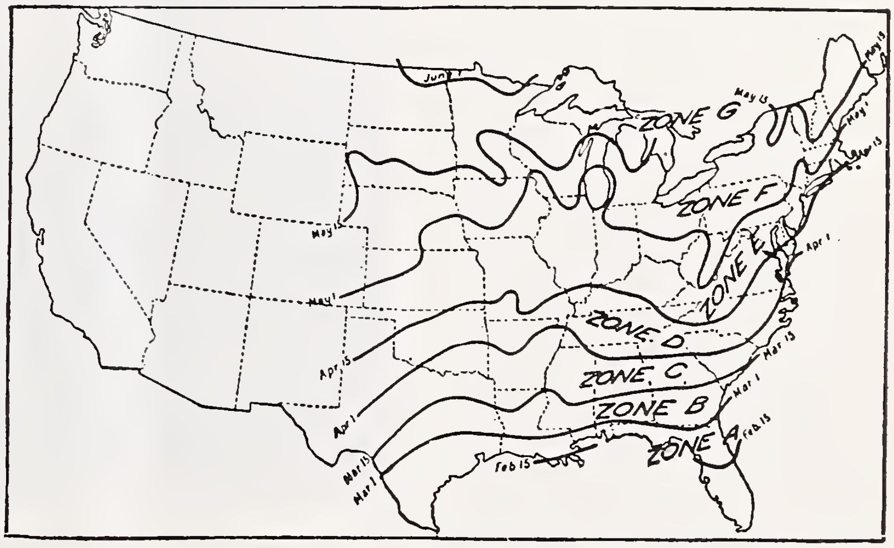
will add to the family's supply of summer greens. The variety known as Lucullus gives good results. As the housewife picks the outer leaves to use for cooked greens or in a salad, the plant goes on forming new leaves at the center and is ready to offer a fresh supply in a few days. Swiss chard should be planted in the early spring. It will withstand the heat of summer, also a light frost, and may often be used in the late fall.

Spinach can be a spring and fall crop and in southern sections of the country it can be grown throughout the winter. Its tender leaves are ready for use in 6 to 10 weeks after the seeds are planted. Longstanding and Bloomsdale Savoy are two varieties which bring good results in spring planting. For fall planting, Norfolk Savoy is a good blight-resistant variety.

Celery, like lettuce, requires a rich soil and plenty of moisture. Many city gardeners prefer to buy celery plants to set in their garden. Celery seedbeds require skillful watering, but the growing of celery is not difficult after the plants are started.

Root crops, such as beets, carrots, parsnips, salsify, turnips, and radishes are naturals for a small garden because of the abundant yield on little space. They may be planted in rows only 12 inches apart and the plants may be as close together as 3 or 4 inches. Most root crops can be planted very early in the spring and replanted later as they are not injured by a light frost.

Radishes are often the first thrill of a garden. They grow quickly and are a tempting and fresh food in the spring when fresh vegetables are still comparatively high in price. It is best to add some additional fertilizer when the seeds are sown—so the growth will be rapid. Radishes that mature too slowly have an undesirable pungent flavor. Ten to twenty feet of row should supply the needs of a family of five. One packet each of two or three varieties planted at



Outline map shows the zones based on the average date of the last killing frost in spring in the United States west to the Rockies. Owing to the varied character of the Rocky Mountains and Pacific coast region, there is too great a difference in the dates of killing frosts in the same general locality to give practical planting information in zone form. Gardeners on the Pacific coast should obtain information about planting from experienced persons in their own neighborhood.

Table below tells the earliest safe dates for planting vegetables in zones shown on map.

Crop	Zone A	Zone B	Zone C	Zone D	Zone E	Zone F	Zone G
Bean:							
Lima	Mar. 1 to 15	Mar. 15 to Apr. 1	Apr. 1 to 15	May 1 to 15	May 15 to June 1	May 15 to June 15	
Snap	Feb. 15 to Mar. 1	Mar. 1 to 15	Mar. 15 to 30	Apr. 1 to May 1	May 1 to 15	May 15 to June 1	May 15 to June 15.
Beet	Feb. 1 to 15	Feb. 15 to Mar. 1	Mar. 1 to 15	Mar. 15 to Apr. 15	Apr. 15 to May 1	May 1 to 15	May 15 to June 1.
Brussels sprouts	do	do	do	do	do	do	Do.
Cabbage	Jan. 1 to Feb. 1	Jan. 15 to Feb. 15	Feb. 15 to Mar. 1	Mar. 1 to 15	Mar. 15 to Apr. 15	Apr. 15 to May 1	May 1 to 15.
Carrot	Feb. 1 to 15	Feb. 15 to Mar. 1	Mar. 1 to 15	Mar. 15 to Apr. 15	Apr. 15 to May 1	May 1 to 15	May 1 to June 1.
Cauliflower	do	do	do	do	do	do	Do.
Celery	do	do	do	do	do	do	Do.
Chard, Swiss	do	do	do	do	do	do	Do.
Collard	Jan. 1 to Feb. 1	Feb. 1 to 15	Feb. 15 to Mar. 1	Mar. 1 to 15	Mar. 15 to Apr. 15		
Corn, sweet	Feb. 15 to Mar. 1	Mar. 1 to 15	Mar. 15 to Apr. 1	Apr. 1 to May 1	Apr. 15 to May 15	May 1 to June 1	May 15 to June 15.
Cucumber	Mar. 1 to 15	Mar. 15 to Apr. 1	Apr. 1 to 15	Apr. 15 to May 1	May 1 to June 1	May 15 to June 15	June 1 to 15.
Eggplant	do	do	do	do	do	do	
Kale	Jan. 1 to Feb. 1	Feb. 1 to 15	Feb. 15 to Mar. 1	Mar. 1 to 15	Mar. 15 to Apr. 15	Apr. 15 to May 1	May 1 to 15.
Kohlrabi	Feb. 1 to 15	Feb. 15 to Mar. 1	Mar. 1 to 15	Mar. 15 to Apr. 1	Apr. 1 to May 1	May 1 to 15	May 15 to June 1.
Lettuce:							
Head	do	do	do	Mar. 15 to Apr. 15	do	do	Do.
Leaf	Jan. 1 to Feb. 1	Feb. 1 to 15	Feb. 15 to Mar. 1	Mar. 1 to 15	Mar. 15 to Apr. 15	Apr. 15 to May 1	May 1 to 15.
Melon	Mar. 1 to 15	Mar. 15 to Apr. 1	Apr. 1 to 15	Apr. 15 to May 1	May 1 to June 1	June 1 to 15	
Okra, or gumbo	Feb. 15 to Mar. 1	Mar. 1 to 15	Mar. 15 to 30	do	May 1 to 15	May 15 to June 1	
Onion sets	Jan. 1 to Feb. 1	Feb. 1 to 15	Feb. 15 to Mar. 1	Mar. 1 to 15	Mar. 15 to Apr. 15	Apr. 1 to May 1	May 1 to 15
Parsley	Feb. 1 to 15	Feb. 1 to Mar. 1	Mar. 1 to 15	Mar. 15 to Apr. 1	Apr. 1 to May 1	May 1 to 15	May 15 to June 1.
Parsnip	do	do	do	do	do	do	Do
Pea:							
Smooth	Jan. 1 to Feb. 1	Feb. 1 to 15	Feb. 15 to Mar. 1	Mar. 1 to 15	Mar. 15 to Apr. 15	Apr. 15 to May 1	May 1 to June 1.
Wrinkled	Feb. 1 to 15	Feb. 15 to Mar. 1	Mar. 1 to 15	Mar. 15 to Apr. 1	do	May 1 to 15	May 15 to June 1
Pepper	Mar. 1 to 15	Mar. 15 to Apr. 1	Apr. 1 to 15	Apr. 15 to May 1	May 1 to June 1	June 1 to 15	
Potato	Jan. 1 to Feb. 1	Feb. 1 to 15	Feb. 15 to Mar. 1	Mar. 1 to 15	Mar. 15 to Apr. 15	Apr. 15 to May 1	May 1 to June 1.
Pumpkin	Mar. 1 to 15	Mar. 15 to Apr. 1	Apr. 1 to 15	Apr. 15 to May 1	May 1 to June 1	June 1 to 15	
Radish	Jan. 1 to Feb. 1	Feb. 1 to 15	Feb. 15 to Mar. 1	Mar. 1 to 15	Mar. 15 to Apr. 15	Apr. 15 to May 1	May 1 to 15.
Salsify	Feb. 1 to 15	Feb. 15 to Mar. 1	Mar. 1 to 15	Mar. 15 to Apr. 15	Apr. 15 to May 1	May 1 to 15	May 15 to June 1.
Spinach	do	do	do	Mar. 1 to Apr. 1	Mar. 15 to Apr. 15	Apr. 15 to May 15	Do.
Squash	Mar. 1 to 15	Mar. 15 to Apr. 1	Apr. 1 to 15	Apr. 15 to May 1	May 1 to June 1	June 1 to 15	
Sweetpotato	do	do	do	do	do	do	
Tomato	do	do	do	do	do	May 15 to June 15	June 1 to 15.
Turnip	Jan. 1 to Feb. 1	Feb. 1 to 15	Feb. 15 to Mar. 1	Mar. 1 to 15	Mar. 15 to Apr. 15	Apr. 15 to May 1	May 1 to 15.

about the same time will come to maturity at intervals, and will supply the dinner table for a period of 4 or 5 weeks. The mild, small French Breakfast and Scarlet Globe varieties are sometimes ready in 20 days after planting. For the second planting, or summer radish, White Icicle, Lady Finger, White Strasburg, Long Scarlet Short Top, and Cincinnati Market are some of the favorites.

One-fourth ounce of carrot seed is ample for two plantings, one in early spring and another in late fall. Carrot seeds should be planted rather thickly, as many as 30 to 40 to a foot, but the seedlings must be thinned. The secret of getting a good yield of carrots which are rated high in food and vitamin values is to thin the plants to about six or eight to a foot. The first baby carrots that are pulled are equally as delicious as the later ones. The second planting of carrots may stay in the ground after the first frost of autumn. They may be stored in moist sand in a cool cellar for winter use. Popular varieties of carrots are Chantenay, Early Scarlet Horn, Danvers, Half Long, and Coreless.

Beets are another valuable root crop. Like carrots, a second late planting will supply a family in late summer and may give them a surplus for winter use. The young tender leaves of the first plants, pulled in thinning the rows, make delicious greens. Crosby's Egyptian and Detroit Dark Red are good varieties for home gardens.

Parsnips require more time to mature than many other vegetables. Only in the South may they be planted both in the spring and in August or September. They should never be sown until the ground is fairly warm and then only fresh seeds should be used, as parsnip seeds are quick to lose their vitality. However, a 10-cent packet of seed, or about an eighth of an ounce, will furnish an ample supply for the average family. In the winter months, parsnips may be stored in the cellar or left in the ground until used. Freezing or cold storage improves their quality. Hollow Crown and Guernsey are two good varieties.

Salsify, primarily a northern crop often known as oysterplant, may also be dug in the late fall and stored for the winter, or like parsnips may be left in the ground during the winter. The Sandwich Island is the best known variety.

In planting onion sets, place every bulb with the root end downward.

Thinnings of turnip plants like those of beets make good greens, and like many other root crops turnips may be saved for winter use. Care should be taken to pull them before the cold weather, however, as their keeping qualities are injured if they are allowed to freeze. In the northern States, turnips are usually sown late in July for an autumn crop, though in the southern States they are often planted in the early spring and sometimes again in September. The Purple-Top-Strap-Leaved and White Globe are the leading varieties.

Cabbage, heady with vitamins and mineral salts, is also an easy vegetable to grow. In many sections of the country, gardeners can plant both an early and late crop to be used in the winter. In northern sections of the country, plants for early crops should be started indoors or southern grown plants should be purchased. Jersey Wakefield and Charleston Wakefield are usually considered best for early planting. Late Flat Dutch, All Seasons, or Danish Ballhead are considered good varieties for fall use. Good seed is especially important, and in regions where cabbage yellows disease is prevalent, resistant varieties originated mostly in Wisconsin should be used.

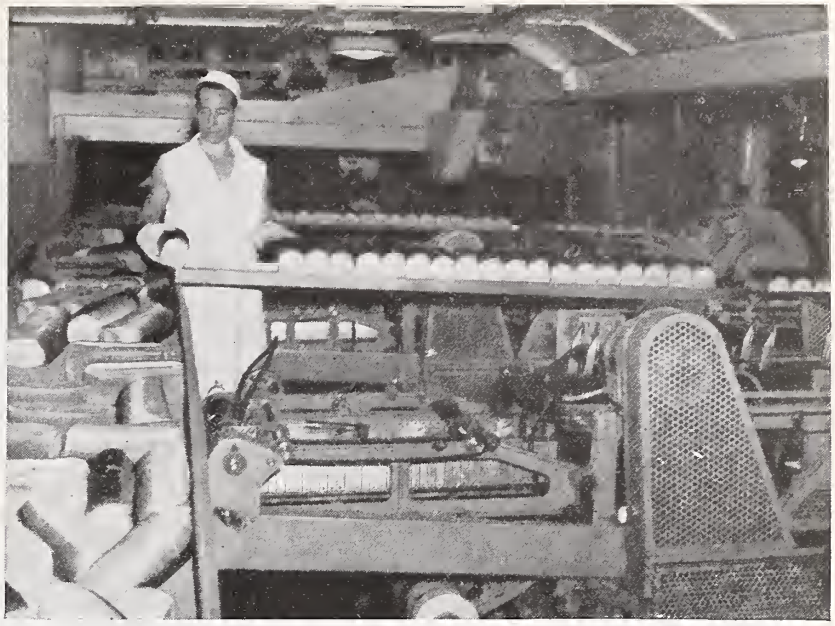
Cauliflower, broccoli, kale, collards, Brussels sprouts, and kohlrabi are all part of the cabbage family. Some are more difficult to grow than others, but they will all flourish in almost any region of the country. In planting any member of the cabbage family, however, the soil should have plenty of plant food so that their growth will be rapid and their leaves tender.

Onions, like radishes, may be among the first products of a garden as they may be planted as early as the ground can be worked. Most home gardeners buy onion sets to plant rather than grow their crop from seed. Onions require a very rich soil and during the growing period best results are obtained if they have an added dressing of fertilizer. A family of five, with a taste for onions, can easily use 1 or 2 quarts of onion sets in the early planting. Prizetaker, Yellowglobe, Red Weatherfield, and Japanese are well-known varieties. Onion sets are not always sold under variety names but are classed as white, brown, red, and yellow. Green

[Concluded on page 23]

BREAD FACTS *For Consumers*

A primer for buyers of the most common staple of poor and rich diets



Last process before wrapping, in many bakeries, is slicing. For consumers sliced bread has its disadvantages as well as advantages.

A 10-CENT bunch of carrots usually gets closer scrutiny before it goes into the family market basket than a 10-cent loaf of bread, yet with most families bread is a major item in the family food budget and must be bought every market day.

If bread buying is to be conducted in any but a haphazard fashion, consumers must know the answers to such questions as these: "What goes into bread?" "What is its nutritional value?" "Why is bread weight important?" "What are the characteristics of good bread?" Answers, culled from the various food experts in the Government, are marshaled here.

What goes into bread?

FLOUR makes up about 57 percent of the weight of a loaf. Some four-fifths of the bread bought by the American public is made of white flour, most of which is bleached or aged by artificial means. Storing for a period before using formerly was the method employed to mature and whiten flour. Millers now accomplish the same results and reduce storage expenses by bleaching the flour with chemical agents such as nitrogen peroxide, nitrogen trichloride, benzoyl peroxide, or chlorine.

Difference of opinion exists as to whether or not bleaching affects the nutritive value of flour. The position of the Food and Drug Administration is that, provided the added chemicals cannot be shown to be harmful or to injure the quality or conceal inferiority, bleaching is not a violation of the Food and Drugs Act. This Administration requires, however, that all bleached flour be marked as such. Very occasionally housewives who do their own baking can find unbleached flour. A few bakers also use it.

Two other kinds of flour most widely used are whole wheat and rye. The flour constituent of bread labeled as whole wheat or graham and sold in interstate commerce must, under Federal Food and Drug regulations, be composed entirely of whole-wheat flour. The usual loaf of rye bread is a mixture of rye and wheat flours, with sometimes more than half wheat. Only a small amount of bread, known as pumpernickel, is made of 100-percent rye flour or meal.

Other starchy substances, such as corn starch or the starch from potatoes, barley, rice, or oats, are sometimes incorporated in bread, corn starch being the one most commonly used. The Federal standard specifies that bread must not contain over 3 percent by weight of these products.

Next important ingredient in bread is liquid. The liquid in most commercial bread is part water and part milk, the proportion of each varying with the formula. In French and Vienna bread only water is used, while standard milk bread must be made with milk or with milk solids and water in the proportions normal to milk. Bakers who put milk into their bread usually use powdered skim milk, both because of its cheapness and the ease with which it may be mixed with the other ingredients. It is a wholesome product which contains all the food virtues of liquid skim milk except Vitamin C. Like liquid skim milk, it lacks the fat and Vitamin A of whole milk.

Yeast, sweetening, and shortening complete the principal ingredients of bread. Sweetening, when present, may be either sugar or malt, or a combination of both. It is difficult to know what shortenings are used in most breads, because bakers guard their formulas carefully, but lard or a cottonseed oil shortening are probably the choice of most. The kind of shortening, unless it is butter, is of little importance nutritionally. Butter has more Vitamin A than lard or vegetable shortening.

Ingredients described so far have a familiar sound to home bakers. Most commercial bakers' bread, however, contains some substances which are quite foreign to a housewife, skilled though she may be in the art of breadmaking. Among these are "bread improvers." Bread improvers when added to dough increase the facility of the flour for absorbing moisture, making it possible to obtain more loaves from a barrel of flour. It is claimed for some "improvers" that they will increase the number of loaves as much as 10 percent, as well as improve the flavor and texture of the bread. Most "bread improvers" are patented products so it is impossible to know their composition. Some European countries prohibit their use. Those so-called "bread improvers" which act solely as yeast nutrients are permitted in the Food and Drug Administration definition and standard for white bread.

Yeast foods, or yeast extenders, are also sometimes called bread improvers. These are substances which increase the activity of yeast, hastening the process of fermentation, thus enabling the baker to use less yeast. The Federal Food and Drug Administration has never pronounced an opinion on the advisability of the use of yeast foods and is reserving judgment for future consideration.

What is the food value of bread?

Four most important considerations in evaluating the nutritive qualities of a foodstuff are vitamin content, mineral content, protein value, and calorie value.

White bread is a poor source of vitamins. Most of the vitamins in a kernel of wheat reside in the wheat germ and the bran, which are removed in making white flour. Removal of these parts of the kernel increases the keeping qualities of the flour but greatly reduces the vitamin content. Wheat germ is an excellent source of Vitamins B and G.

White bread is low in calcium and iron, two of the most important minerals to consider in selecting a well-balanced diet. Most of the minerals in wheat reside in the bran coating and in the germ. Whole-wheat bread is a good source of iron but is still on the minus side for calcium.

Bread, either white or whole wheat, supplies some protein. It is not an especially rich source, and the protein is not of the highest quality nutritionally. But because bread is eaten in relatively large amounts, it makes an important contribution to the protein requirements of the body.

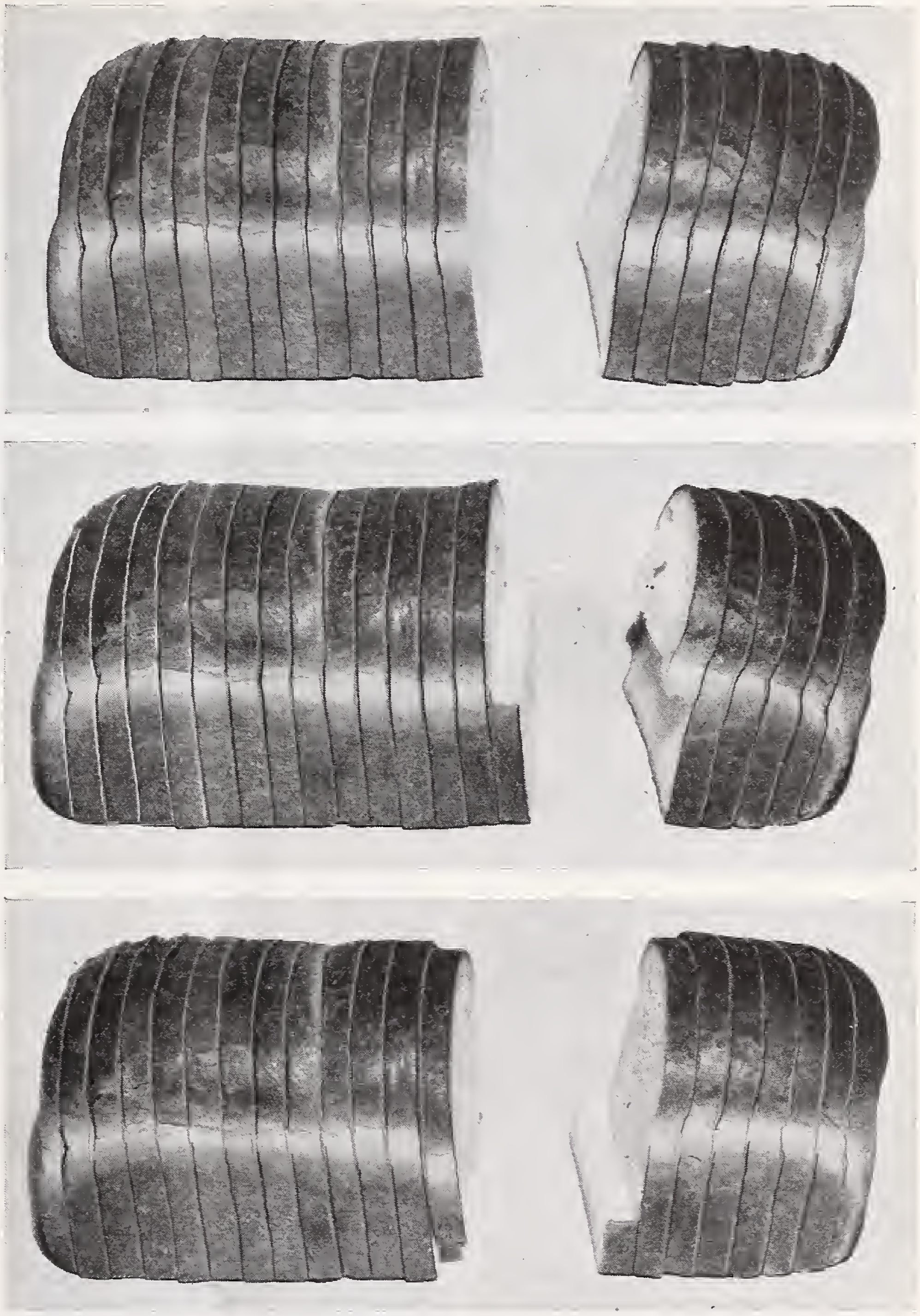
As a source of calories, bread ranks high. One ordinary slice provides fifty calories or more. Weight for weight, whole-wheat bread is very similar to white bread in calorie value. A food of high caloric value supplies the body with the energy required for muscular activity, and for this reason bread and other cereal products have an important place in the diet of active children and those doing physical work. The important point is that bread provides this energy at a comparatively low cost.

Milk steps up the vitamin, mineral (especially calcium), and protein content of bread. Milk breads are therefore more nutritious. Since cost of dry skim milk is small, its addition should not be made the excuse for a premium price for the bread.

Most nutritionists agree that people who cannot afford adequate amounts of fruits, vegetables, milk, and eggs—foods rich in vitamins and minerals but, unfortunately, comparatively expensive—had best

All bread sold in interstate commerce, and much that is sold intrastate, must be marked with its weight. Wise consumers check this information carefully because size is not always an indication of weight. These loaves all weighed one pound.

include a good proportion of whole-grain cereal products. Others who can afford to include in their diet adequate amounts of these mineral- and vitamin-rich foods may select that bread which appeals most to their taste.



The slices of bread on the right hand of each of these loaves represent the part that ingredients cost in the price consumers pay for bread. On the basis of the average retail price of a pound loaf of white bread, and of the kind and amount of ingredients used in making a typical loaf, the right-hand 7 slices in the top loaf represent the cost of ingredients and the left-hand 13 slices represent the costs and profits of bakers and distributors in 1929; 5½ slices represent ingredient costs in 1932. These costs had increased in 1936, when 7.2 slices represent their share in the total cost of the average pound loaf.

Why is bread weight important?

Consumers who watch their pennies buy bread by weight. By fermenting the dough excessively, a baker can make a large loaf which weighs several ounces less than a smaller, less aerated one. The difference of 2 or 3 ounces in a loaf of bread may seem like a trivial concern, but the housewife who purchases daily two 14-ounce loaves, instead of pound loaves selling at the same price, will have cheated herself by the end of a year of approximately 91 pounds of bread. A decrease in weight often passes unnoticed, though the results on the pocketbook are the same as a rise in price.

Some States have passed laws touching on the weight of bread. These laws are, in general, of two kinds: (1) Those requiring that only loaves of certain specified weights be sold (for example, ½ pound, ¾ pound, 1 pound, 1½ pounds, and 2 pounds); and (2) those requiring that bread be labeled with its weight. Seventeen States have laws of the first type.[1] Seven States require that bread be labeled with its weight.[2] New Jersey requires that all bread must be sold by weight, and this weight must be specified if the consumer requires it. Pennsylvania has a somewhat similar law which specifies, in addition, that scales must be provided at all selling points. Seven States delegate the matter of bread weights entirely to the city councils.[3] Fifteen States are entirely without bread-weight laws.[4]

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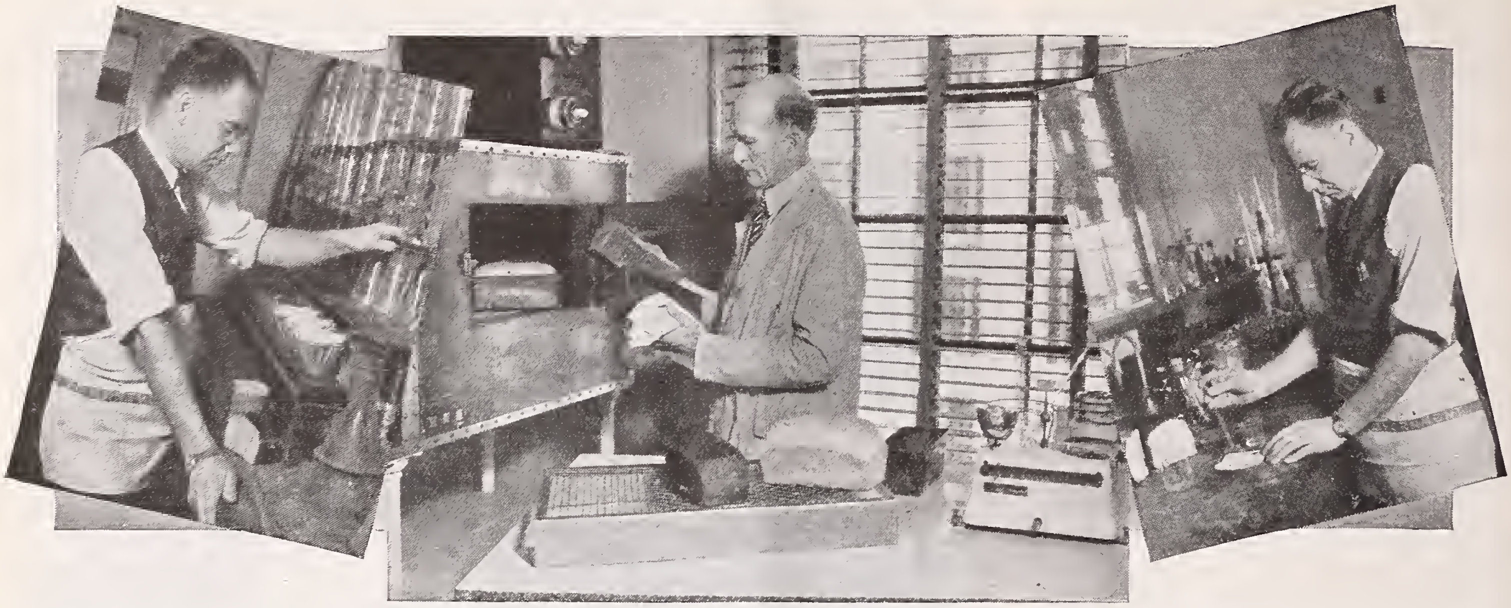
[1] Arizona, California, Connecticut, Delaware, Idaho, Kansas, Massachusetts, Montana, Nebraska, Nevada, New York, North Dakota, Oregon, South Dakota, Texas, Washington, and Wisconsin. The District of Columbia also has a law of this nature. Some of these States require that if loaves of other weights than those specified are sold, the weight must be marked on the wrapper.

[2] Alabama, Indiana, Iowa, Louisiana, Minnesota, Ohio, and Virginia.

[3] Colorado, Florida, Illinois, Kentucky, Missouri, New Mexico, and Rhode Island.

[4] Arkansas, Georgia, Maine, Maryland, Michigan, Mississippi, New Hampshire, North Carolina, Oklahoma, South Carolina, Tennessee, Utah, Vermont, West Virginia, and Wyoming.



To the left and right are scenes in the laboratories of the Food and Drug Administration where an expert is performing a test (left) on the amount of bran present in a loaf of whole-wheat bread, and another (right) on so-called "laxative health bread" which the Administration classes as an adulterated form of bread. In the center, a scientist in the Bureau of Chemistry and Soils is removing from the oven some loaves of bread made with flour which has been offered for sale to a Government institution. Before the flour is purchased by the Government, it is tested to see whether it measures up to specification.

What are the characteristics of good bread?

Quality of bread is determined by the ingredients used, the way in which they are mixed, and the fermenting and baking of the dough—all things which vary with different bakers and about which it is difficult or impossible for the consumer to get information. There are, however, certain characteristics to guide consumers to products of good quality:

COLOR

A slice of white bread should have a satiny luster, show no streaks, not have a greyish cast. Milk bread should have a creamier cast than ordinary white bread.

GRAIN

In white bread the grain should be even, no large holes, no streaks or extreme closeness of grain. Cell walls should be thin and elongated upward.

TEXTURE

In white bread the texture should be elastic, soft, springy.

FLAVOR

Flavor of white bread should be that of well-blended ingredients and well-baked loaf; no suggestion of sourness, yeast, mustiness, or other "off" flavors; salt enough to prevent flat taste. Graham and whole-wheat bread should have a pronounced whole-grain flavor.

LOAF

Should be oblong, symmetrical, with an evenly rounded top.

Trade practices important to consumers

When breadmaking first began to be done outside of the home, two adjoining rooms, a salesroom and kitchen, constituted a bakery, and the customer was not infrequently handed bread hot from the oven. Now the bread you buy may have been baked hundreds of miles away, and the baking industry has become one whose business each year runs into millions of dollars. As the almost inevitable consequence of such tremendous growth, certain trade practices have been adopted by some members of the industry which merit scrutiny by consumers.

"Rolling" is the term used in the trade for the practice of collecting stale bread from one store and mixing it in with the fresh bread to be delivered to other stores. This practice has arisen because some companies penalize their driver-salesmen for the "stales" which they return. The most adequate protection against this practice is to have bread labeled with the date on which it was baked. Dating bread is done by some bakers.

Trade names used for bread should be questioned by the consumer. Bread shipped in interstate commerce, and so coming under the jurisdiction of the Federal Food and Drug Administration, must not be misbranded. Most State laws offer similar protection. Under such laws bakers who sell a "Butter Cream" loaf which contains neither butter nor cream, or "Honey Bread" which has no honey in it, expose themselves to legal difficulties.

Advertising of locally produced and distributed foods is seldom regulated. A bread may be advertised as having exceptional nutritive value because it contains milk, butter, even eggs. Granted that these ingredients are present, the amount in one loaf may be so small as not to justify special claims made for them. In recent years some manufacturers have been selling bread containing Vitamin D. Experts are not yet agreed that adults need any more Vitamin D than they get from a well-balanced diet. A useful consumer protection would be the printing of the ingredients and the amount of each on the wrapper of every loaf.

Slicing bread does not come in the same category as the other trade practices mentioned, but it will do no harm for the consumer to look at this practice somewhat critically. Sliced bread is undoubtedly a convenience, but it has its disadvantages. It dries out more quickly and is more likely to become moldy, both because a greater surface is exposed to moisture and air and because of the possibility of becoming contaminated by the slicing machine.

For sanitary reasons, almost everyone wants bread wrapped. Some recent studies are claimed to show that the pure cellulose wrappers are more desirable than some waxed papers, as they give no undesirable flavor to the bread. Some waxed papers and ink inscriptions, it is claimed, give off odors that are absorbed by the bread.

Toward more adequate consumer protection

Two kinds of protection of their bread supply are now given to consumers.

The United States Food and Drug Administration has set up a minimum standard for bread which specifies that it must not contain more than 38 percent moisture; that not more than 3 percent starchy substances other than wheat flour be used; and that the flour used in whole-wheat, entire wheat, or graham bread must be composed entirely of whole-wheat flour. This standard, as all Federal control over foods, applies only to goods shipped in interstate commerce.

Some States and municipalities have laws regulating the weight of bread loaves.

Greatest need of consumers for intelligent buying of bread, as of most other manufactured foods, is more information about the kind and amount of its ingredients.

Wrappers which tell what ingredients and how much of each were used in making a loaf would do much to help consumers become better buyers. With such labeling, those who wish to buy a whole-grain product would be assured of obtaining what they want instead of bread which possibly contains only 50 percent or less whole-grain flour. People who want the added richness in bread that comes with the use of butter and milk would know just how much of such substances they are obtaining.

People who want the added richness in bread that comes with the use of butter and milk would know just how much they were getting if wrappers told what ingredients and how much of each were used in making the loaf.

Dating bread with the day it was baked would guard the consumer against paying fresh-bread prices for stale bread. Those bakers who have dated bread up to this time have either marked the label or wrapper with the day on which it is to be sold, or with the day on which it was baked. The latter is to be preferred, for the consumer has a right to know how great a time lag there is between baking and distribution to the retailer.

Strict supervision of the sanitary conditions of bakeries should be maintained. Comments of consumers who have first-hand acquaintance with conditions in some bakeries, as well as comments in the trade press, are evidence that such supervision often does not exist, with the result that there frequently exists gross carelessness in the handling of raw materials and in keeping the plant and equipment clean.

Some States have laws governing sanitary conditions in establishments handling food. In such States either the State Public Health Department or the State Food and Drug officials are responsible for supervision. Where there is no State law, supervision of sanitary conditions of food plants is left entirely to the municipalities, the city public health department being the body usually in charge of enforcing any existing law.

It is highly desirable that bread, so important in the diet of low-income groups, should be priced as low as is compatible with production of high-quality goods, fair wages for labor in the industry, and a legitimate profit for the manufacturers. Any comprehensive analysis of the facts which enter into the determination of bread prices would call for an extended economic discussion.

[Concluded on page 22]

Consumers' BOOKSHELF

This reading list of bulletins on consumers' cooperation—eleventh installment of our bibliography for students of consumer problems—includes only materials published by the Federal Government or by State Emergency Relief Administrations

GENERAL—FEDERAL

Are Price Tags Enough? by D. E. Montgomery, Consumers' Counsel. Consumers' Guide, Vol. III, No. 22, November 30, 1936, pp. 3–6, 21–23. Reprint available from: Consumers' Counsel Division, Agricultural Adjustment Administration. Free.

Are We All Consumers? by D. E. Montgomery, Consumers' Counsel. February 1937, 10 pp., mimeographed. Address: Consumers' Counsel Division, Agricultural Adjustment Administration, Washington, D. C. Free. In this address, given before the Rhode Island Agricultural Conference, Mr. Montgomery puts some challenging questions to cooperators.

Cooperative Systems of Scandinavia and Baltic States, by A. M. Ryhn. Special Circular, No. 372. September 1936, 28 pp., mimeographed. Address: U. S. Bureau of Foreign and Domestic Commerce, Washington, D. C. 5 cents. A brief description of the cooperative movements in Denmark, Norway, Sweden, Finland, Lithuania, Estonia, and Latvia.

Cooperative Work for Women. Undated, 22 pp., mimeographed. Address: Resettlement Administration, Washington, D. C. Free. Suggestions on and a discussion of cooperative work for women, such as organizing children's clinics, day nurseries, kindergartens, cooperative medical associations, dental associations, summer camps, and rural electrical cooperatives.

What Should Farmers Aim To Accomplish Through Organization? DS–6. December 1936, 14 pp., illustrated. Address: Extension Service, U. S. Department of Agriculture, Washington, D. C. Free. A discussion, pro and con, of the advisability of farmers organizing and participating in marketing, purchasing, electrical, credit, and health cooperative associations. One of several pamphlets issued in the 1936–37 rural discussion group program series.

The Farm Credit Administration, Washington, D. C., issues pamphlets giving general information about cooperatives. The supply of these publications is so limited that it is inadvisable to list them here. Persons having a special interest in cooperative affairs should get in touch with this agency.

GENERAL—STATE

California

Handbook of California Cooperatives, by State Emergency Relief Administration Research Project on Consumers' Cooperatives in California. September 1935, 179 pp., charts, mimeographed. Address: California State Emergency Relief Administration, 714 South Flower Street, Los Angeles, Calif. Limited distribution available free of charge to officials of cooperative associations and students of the cooperative movement. Contains sections reviewing consumers' cooperation abroad and in the United States and has a selected bibliography on the subject. Includes data on history and present activities of consumers' cooperatives in California. Defines and gives a brief history of cooperatives by type. Material on protecting the consumer and on pseudo-cooperatives and rackets in California is included.

Minnesota

The following set of five pamphlets can be obtained by writing to the State of Minnesota, Department of Education, St. Paul, Minn.

What Is Consumers Cooperation? Lesson I. Undated, 17 pp., multigraphed. Address: State of Minnesota, Department of Education, St. Paul, Minn. 10 cents, or 25 cents for series of five. The story and significance of the Rochdale pioneers from the time they started their first cooperative store up to the present day.

CREDIT UNIONS: A STORY OF COOPERATIVE CREDIT. Lesson II. Cooperation. Undated, 16 pp., mimeographed. Address: State of Minnesota, Department of Education, St. Paul, Minn. 10 cents, or 25 cents for series of five. Treats of the history, contribution to members, and operation of credit unions. Contains questions on the text and lists additional sources of information on credit unions.

CLARKS GROVE: THE STORY OF A COOPERATIVE COMMUNITY. Lesson III. Cooperation. Undated, 14 pp., mimeographed. Address: State of Minnesota, Department of Education, St. Paul, Minn. 10 cents, or 25 cents for series of five. Many Minnesota cooperatives sprang up as a result of the inspiration afforded by the Clarks Grove Cooperative Creamery, started in 1890.

THE COOPERATIVE MOVEMENT IN SWEDEN, ITALY, AND RUSSIA. Lesson IV. Cooperation. Undated, 28 pp., charts, mimeographed. Address: State of Minnesota, Department of Education, St. Paul, Minn. 10 cents, or 25 cents for series of five. Considers briefly the history and present status of cooperatives in Sweden, Italy, and Russia. Shows how cooperatives have fared under three different types of government.

COOPERATION: A WORLD MOVEMENT. Lesson V. Cooperation. Undated, 25 pp., mimeographed. Address: State of Minnesota, Department of Education, St. Paul, Minn. 10 cents, or 25 cents for series of five. The first section of this booklet presents a concise review of the present status of cooperation throughout the world. Section 2 outlines the progress of cooperatives in the United States. Section 3 considers the cooperative movement in Minnesota.

ORGANIZATION AND MANAGEMENT

FEDERAL CREDIT UNION BY-LAWS, 1935, 15 pp., mimeographed. Address: Farm Credit Administration, Washington, D. C. Not for general distribution. Available free of charge only to credit-union officials or students of credit-union problems. A specimen copy of by-laws for credit unions. Can be adapted to local needs.

SUGGESTIONS FOR ORGANIZATION MEETING AND FIRST BOARD OF DIRECTORS' MEETING. April 1935, 4 pp., mimeographed. Address: Farm Credit Administration, Washington, D. C. Not for general distribution. Available free of charge only to credit union officials and students of credit union problems. Suggestions on how to put the credit union into operation after subscribers have received their approved organization certificate.

ORGANIZATION AND MANAGEMENT OF COOPERATIVE GASOLINE AND OIL ASSOCIATIONS (with model by-laws), by U. S. Bureau of Labor Statistics. Bulletin No. 606, Cooperation Series. 1934, 42 pp. Address: Superintendent of Documents, Washington, D. C. 5 cents. Organization suggestions based on the experience of several hundred associations handling tires and accessories, as well as petroleum products. Describes the methods of organization, operation, and business policies. Also includes a section on buying of supplies.

ORGANIZATION AND MANAGEMENT OF CONSUMERS' COOPERATIVE ASSOCIATIONS AND CLUBS (with model by-laws), by U. S. Bureau of Labor Statistics. Bulletin No. 598, Cooperation Series. July 1934, 76 pp. Address: Superintendent of Documents, Washington, D. C. 10 cents. Part 1 of "this bulletin is concerned with methods of organization for consumers' cooperative associations of all types, whether for the supply of goods or services. . . . Part 2 presents information and by-laws adaptable to the more elementary form of consumers' cooperative effort—the cooperative buying club."

ORGANIZATION AND MANAGEMENT OF COOPERATIVE HOUSING ASSOCIATIONS (with model by-laws), by U. S. Bureau of Labor Statistics. Bulletin No. 608, Cooperation Series. 1934, 40 pp. Address: Superintendent of Documents, Washington, D. C. 5 cents. Outlines methods of organizing, financing, and operating cooperative housing associations. Includes model by-laws, sample member's subscription agreement, model lease, and sample income and expense statement.

RURAL ELECTRIFICATION

COOPERATIVE SOCIETIES UNDER THE RURAL ELECTRIFICATION PROGRAM. Reprint from the *Monthly Labor Review,* Serial No. R. 422. September 1936, 4 pp. Address: Bureau of Labor Statistics, United States Department of Labor, Washington, D. C. Free. A brief account of the program and policies of the Rural Electrification Administration as they relate to rural electrical cooperatives. Lists the REA projects approved up to July 14, 1936, by type of organization.

ELECTRIC POWER ON THE FARM, edited by David Cushman Coyle, Rural Electrification Administra-

[Concluded on page 22]

FUNGUS *for* FLAVOR

Still a frill for most consumers but an expanding business for producers, mushrooms are inching their way out of the luxury class to add flavor and variety to more moderate priced diets

Fresh mushrooms are ordinarily marketed in 3-pound baskets in the East. In the West the 1-pound paper carton is preferred.

Forget the mushroom when charting a meal for food values. In both calories and vitamins they are rated low. But as a food accessory, as a garnish for meats, as an ingredient in soups, or chicken à la king, they come into their own. They are also delicious broiled, stuffed, or creamed.

Distinctive flavor has made these members of the fungus family a festive food since ancient times, but it was not until the latter part of the nineteenth century that the cultivation of the wild mushroom was begun in this country. At first it was considered a sideline to market gardening. Today it has become a flourishing industry which produces over 20 million pounds of mushrooms a year.

Only variety cultivated in the United States on a large scale is the "Agaricus Campestris." The white, brown, and cream cap mushrooms which we see in our grocery stores are of this type. In Europe and the Orient many other kinds of fleshy fungi are sold. In the former, it's cèpes and truffles, in the Orient the shii-take and matsu-take are popular. Dried imported mushrooms are often of these species. America's mushroom industry dries very little of the product. The majority of it is marketed fresh or canned.

Mushrooms are a highly perishable food. Quick and easy access to large city markets, rather than weather and soil conditions, dictates where mushrooms are grown. Delaware and northern Pennsylvania have three-fourths of the industry, though there are important centers in other States.

Most crops require certain types of soil. Some thrive best where there are long periods of cold, others need months of heat to come to fruition. Mushrooms will grow either in the sunlight or in the dark. The living mushroom mycelium, often called spawn, from which the edible mushroom develops is indifferent to locality provided it is bedded in the proper kind of manure in a place where the humidity and temperature are just right. Climate should be such that conditions inside a mushroom house can be controlled. For this reason culture is confined mostly to northern States. If conditions are favorable, mushrooms will flourish in cellars, caves, abandoned mines, or buildings. The use of old buildings and quarries is a matter of economy.

Today mushroom growers producing on a large scale build special insulated houses so that they can control the ventilation, temperature, and humidity. Another advantage of a special structure is that the crop may be more easily protected against disease and insect pests. The growing of mushrooms is an exacting business which requires great attention to details in preparation of the beds and care of the crop. Improperly fermented manure, poorly regulated temperatures, or humidity may cause failure. The average yield for a bed of cultivated mushrooms is 1 pound to a square foot during the lifetime of the bed, which is around 3 months.

Good spawn is essential in mushroom cultivation. Early mushroom growers made their spawn from mycelium growing naturally in the field or in piles of horse manure. Today, for the most part, they buy it in bottles from spawn makers who specialize in developing pure cultures from germinated spores collected and grown under aseptic conditions. The germination of the spores and development into the cordlike strands of the mycelium is the first phase in the life cycle of the mushroom. Then follows the development of the mycelium underground and the growth of the edible mushroom above ground. The cycle is completed when the spores, which are found on the gills, or the platelike folds on the lower surface of the cap, are produced. It takes from 5 to 10 weeks from the time of spawning for the mushrooms to appear. When once they do appear, they grow rapidly and are pulled before the membrane or veil connecting the stem with the cap is ruptured.

Hot weather spells death to a mushroom bed, but if the temperature is artificially controlled and if refrigeration is used during the summer months, mushrooms may be produced the year around. When one bed is through producing the manure may be removed and a new bed made for a fresh crop. Good beds which are kept between 45° and 55° F. will continue to bear mushrooms for 5 or 6 months. An average bed lasts about 3 months.

Consumers will find that mushrooms are highest in price in summer when fewer are produced. Prices also vary in different sections of the country. They are more expensive in localities removed from the growing centers. Fresh mushrooms are sold by weight, often in 3-pound baskets or in 1-pound paper cartons.

White mushrooms with wide umbrella-like caps bring the highest price. Consumers seem to favor this color over the brown or cream variety, though many mushroom connoisseurs will tell you that this is a distinction based on appearance rather than flavor. They contend that the brown cap mushroom is superior in taste. White mushrooms grow as prolifically as the other types, but they have a tendency to produce more buttons than large mushrooms. ("Buttons" are small closed mushrooms, usually less than an inch in diameter.) They also require more care in packing and shipping as they are easily bruised.

As for many another food, the Bureau of Agricultural Economics has drawn up a standard of quality for mushrooms which growers and buyers use in trading. Sometimes consumers can find a grade mark on the container in which mushrooms are marketed at retail.

"U. S. No. 1" grade mushrooms must be of the same type and color, and not less than 1 inch in diameter. They must be well formed, free from disease, open caps, insect injury, spots and damage caused by dirt. The stems must be trimmed and not exceed 1¼ inches in length. Fresh mushrooms which do not measure up to these specifications are unclassified. If the mushrooms measure up to the quality requirements of "U. S. No. 1", the containers may be marked "Small", "Medium", "Large", and "Extra Large." "Small"

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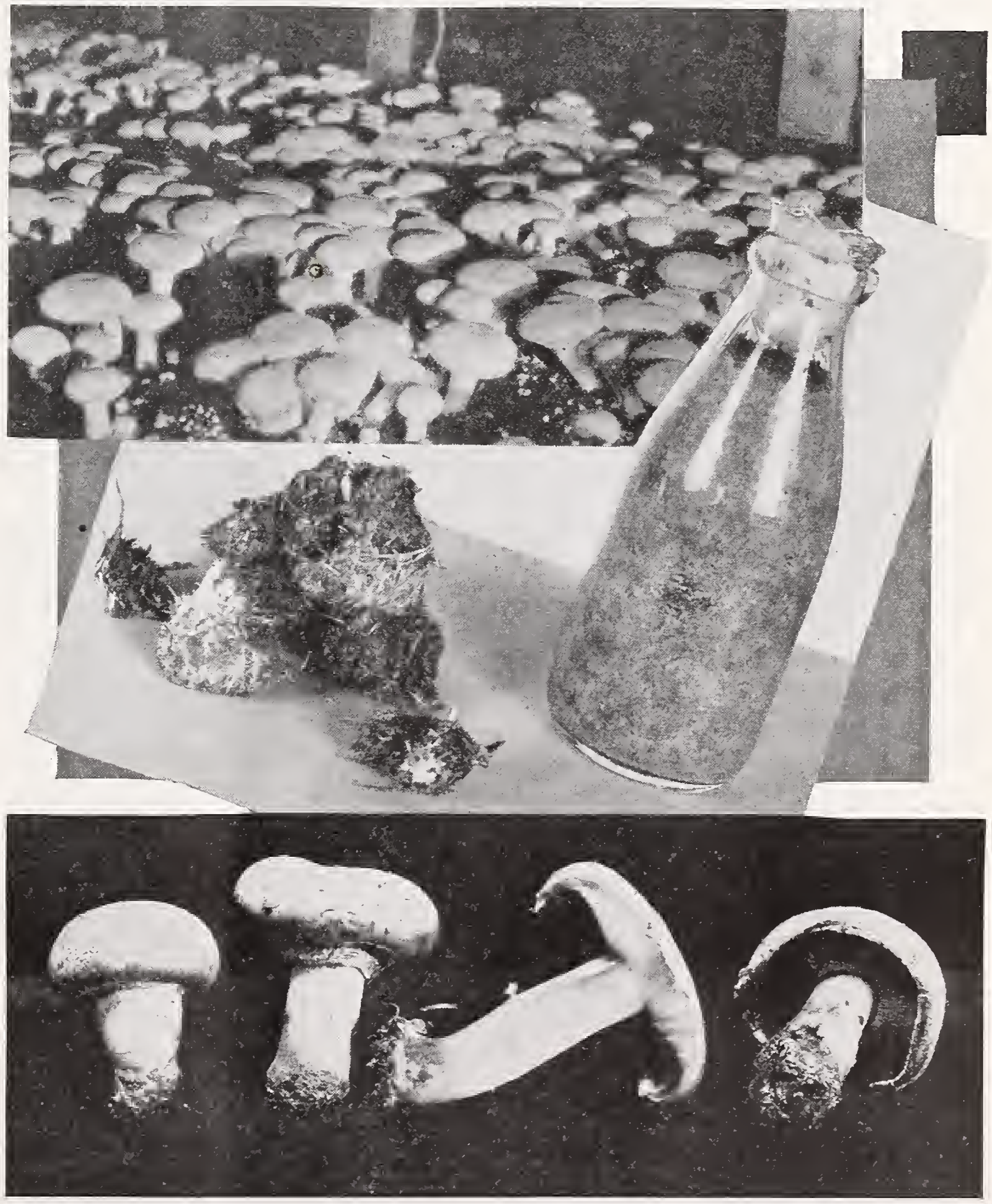


In buildings, mushrooms are usually grown in tiers of flat beds . . . the germination of mushroom spores results in a threadlike growth called mycelium, or spawn. Most mushroom growers buy their spawn by the bottle from firms which specialize in making a pure-culture product. . . . Mushrooms develop from the button stage, through the ring-breaking stage, to maturity.

Your Food Costs

Consumer food costs reached their highest level since February 1931 when the cost of all food groups except eggs moved up from February 16 to March 16. The 1.1 percent increase in the level of food costs in general during that month was due primarily to price advances in dried and fresh fruits and vegetables, and meats. Fruit and vegetable costs in general have been going up since mid-November. The recent meat price advance, however, was the first, with the exception of the temporary increase early in January, since last August.

Trend of retail food costs in general probably will continue slightly upward during May and remain above last year's level. Mostly because of the 1936 drought, supplies of many food products are smaller than a year ago. Consumers' incomes are larger.

Compared with earlier periods, food costs on March 16 were still well under pre-depression levels, but well above depression levels and last year's costs. The index on that date stood at 85.4, as against 100.0 for 1923–25 and 101.4 on March 15, 1929. At the bottom of the depression, on March 15, 1933, this index had dropped to 59.8. Costs now are 7 percent higher than a year ago.

Spring lambs are expected to arrive at markets later than usual. Supplies are estimated to be 10 percent below a year ago. Consequently prices probably will be higher than a year ago, with no seasonal decline until late June. Spring lambs are milk-fed lambs from 3 to 5 months of age. Most of the crop usually is marketed prior to the end of June.

Hog slaughter most likely will increase seasonally during late April and May, at which time fall pigs move to market in volume. Prices probably will not change much. Further improvement in consumer demand for meats is expected to offset the increase in current slaughter as well as the effect of relatively large pork and lard storage stocks. Price increases are in prospect from July to September, when small hog supplies are expected.

Beef cattle prices and retail prices are expected to advance further during the next month, with the major changes in the better grades.

Poultry prices have been going up, but they have remained below their level a year ago. Prices usually advance at this time of the year. Record size cold-storage holdings, however, have resulted in less than seasonal advances. After the peak in poultry prices is reached in May, the prospect is for smaller than seasonal price declines. High prices of feed compared with egg and poultry prices have reduced the number of hatchings, the main source of chickens marketed after May.

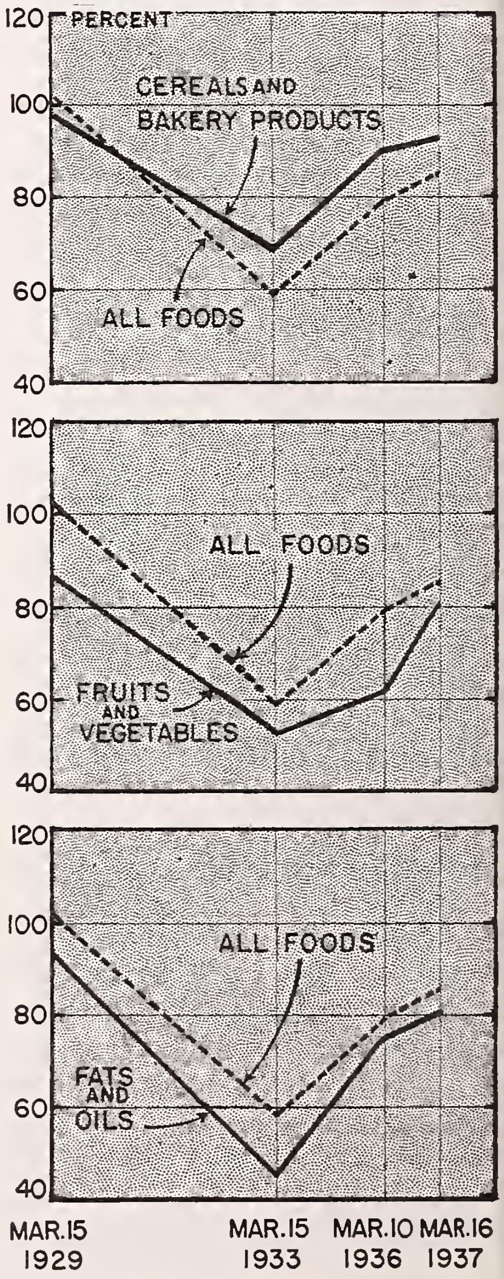
Butter production has not increased as much as it usually does at this time of the year because of relatively high feed prices. Small butter supplies and increased consumer purchasing power were the primary factors in raising retail prices 1.1 cent to 41.8 cents per pound from February 16 to March 16. Prices advanced further in March, but in early April receded to below their mid-March level.

Larger than usual decline in retail butter prices may occur from April through June. Prices probably will average higher than a year ago. Prices have not registered their usual decline during the first quarter of the year. This leaves a shorter period for the seasonal decline which occurs when cows go on pasture. Marked increase in butter production is in prospect when cows go on pasture after a winter feeding period of short rations.

Fruit prices, with the exception of strawberries, are expected to go up this spring. Strawberry shipments should increase rapidly this month, with peak marketings and lowest prices in May. The smallness of recent shipments of berries was due to frost damage that delayed maturity of the crop. Supplies from the earliest producing States are estimated at 21 percent above a year ago and the largest since 1933.

Grapefruit supplies for the remainder of the season are only

A PERSPECTIVE OF FOOD COST CHANGES
1923~1925=100

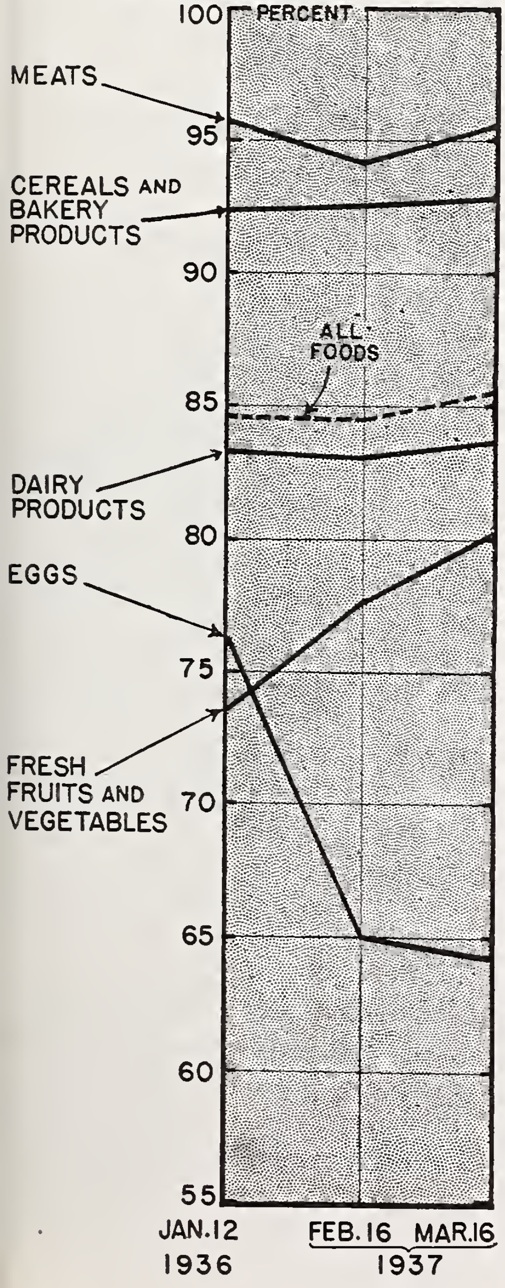


and Supplies

slightly larger than last year's. Because supplies are no larger than average (1931–35) and current prices are relatively low, the usual spring and summer price increase may be larger than usual. Indicated 1936–37 production was the largest on record. Unusually large canning operations have reduced supplies to average amount.

Orange supplies for spring marketing probably will be slightly smaller than average, and prices most likely will make their usual advance.

A CLOSE UP OF FOOD COST CHANGES
1923~1925 = 100



In the summer and fall, when extremely small supplies are expected, a sharper than seasonal increase is in prospect. California Valencia or summer oranges will start coming to market the latter part of this month. The summer crop of 14.4 million boxes is 4 million boxes less than a year ago and 29 percent below average.

Lemon production of 5.7 million boxes is 2 million boxes below a year ago and the smallest since 1924. Prices are at a relatively high level and are expected to advance seasonally.

Asparagus prices probably will decline until shipments reach their peak this month. Relatively high prices at the start of the season in March were due to unfavorable growing weather, which delayed maturity and shipment of the crop.

Lower lettuce prices are in prospect. Spring lettuce supplies are estimated at 16 percent less than a year ago, but the second largest on record. Heavy movement of the crop occurs during the first part of April from Arizona, and again during the latter part of May from California. Recent high lettuce prices were due to freeze damage in California, which sharply reduced supplies before Arizona was ready to ship.

Retail vegetable prices, with the exception of carrots and spinach, increased during the 4-week period, due primarily to unfavorable weather conditions. The new onion crop is due to start moving this month, and prices probably will go down. Because of a short crop a less than seasonal decline is expected. Seasonally lower prices are indicated for most truck crops during the next few months. However, tomato prices are not expected to decline seasonally until June and may even advance this month because of a continuation of poor weather in Florida.

Production of vegetable canning crops probably will be larger than a year ago in view of recent high prices for canned goods. Stocks of canned corn, peas and snap beans are materially smaller than the relatively large canned stocks a year ago. Stocks of canned tomatoes appear to be only slightly smaller than last year, but material increases are reported for canned asparagus and spinach. Carry-over stocks at the end of the current marketing season probably will be smaller than a year ago. This situation has tended to strengthen prices of canned vegetables generally.

First increase in average retail white-bread prices since August 1936 occurred from February 16 to March 16. Prices advanced 0.1 cent to 8.3 cents a pound loaf, the same price as a year ago. This was the highest retail bread price since March 1936. The cost of bread ingredients, mainly flour, has been going up slowly since last November.

Potato prices are expected to move down during May. The decline is expected to begin as soon as new potato shipments attain volume. New potatoes are now coming from Florida and Texas, where production is forecast at 1.7 million bushels above last year's 2.8-million bushel crop.

First watermelons probably will be shipped from Florida late this month or early in May. Cantaloup season will commence in May with shipments from the Imperial Valley in California. Acreage planted to early cantaloups and watermelons is estimated at over 20 percent larger than a year ago.

FUNGUS FOR FLAVOR

[Concluded from page 19]

mushrooms are defined, under these standards, as under 1 inch in diameter; "medium", from 1 to 1⅝ inches; "large", 1⅝ to 3 inches; "extra large", over 3 inches.

Canners prefer buttons or small mushrooms. Button mushrooms are canned whole or sliced. Imperfect, cut, or broken portions of stems and caps are canned separately and are cheaper in price. In the tentative U. S. grades for canned mushrooms, color, symmetry, uniformity of size are the most important factors in ascertaining quality.

U. S. Grade A canned mushrooms must have the same varietal characteristics, must be practically uniform in color, size, and symmetry, with stems cut transversely so that the distance from the top of the cap to end of stem does not exceed the diameter of the cap. The mushrooms must be practically free from defects, have a firm texture and a normal mushroom flavor.

U. S. Grade C canned mushrooms must have similar varietal characteristics—but may vary somewhat in color, size, and symmetry.

U. S. Grade A and U. S. Grade C sliced mushrooms must meet the requirements of their respective grades. They must also be sliced parallel to the axis of the mushroom into slices of uniform thickness, approximating three-sixteenths of an inch, with imperfect pieces removed.

Many varieties of wild mushrooms are edible, but consumers with a yen for mushrooms should resist the temptation of gathering them for food. It is very difficult to distinguish between many of the edible and poisonous species, and a mistake may be fatal.

Cultivated mushrooms are safe mushrooms. Both the cap and the stem are good to eat. It is not necessary to peel them unless the skin is tough. Then it is best to use a glass or steel knife. Mushrooms should not be allowed to soak in water as they quickly lose their flavor.

STUDY QUESTIONS FOR THIS ISSUE

1. Who can organize a Credit Union?
2. What loans can be made by a Federal Credit Union?
3. What is the maximum interest rate Federal Credit Unions may charge on loans?
4. What is the usual dividend rate paid on shares?
5. What percentage of your family food bill goes for bread?
6. What is the law in your State regarding the weight of bread loaves and labeling of weight on bread wrappers?
7. What is the minimum standard for bread set by the United States Food and Drug Administration?
8. Would you buy more bread if—
    - (*a*) the wrappers showed the kind and amount of ingredients?
    - (*b*) wrappers were dated to show the day the bread was baked?
9. What is the food value of mushrooms?
10. Describe "U. S. No. 1" grade of fresh mushrooms.

BREAD FACTS FOR CONSUMERS

[Concluded from page 15]

There is one basic fact about bread costs, however, which consumers should know.

Material costs in a loaf of bread usually amount to just a little more than one-third the price consumers pay for a loaf. At the bottom of the depression, due to the ruinously low price paid to farmers for their wheat, material costs represented only about 28 percent of the retail price. Too often in the past bakers have been quick to use a rise in flour or wheat prices as justification for increasing bread prices. The price of a barrel of flour must rise about three dollars to justify, on the basis of that ingredient cost, a one-cent rise in a pound loaf of bread.

Readiness to adjust bread prices up to a rise in the cost of wheat or flour is not always counterbalanced by a corresponding readiness to adjust bread prices downward when the cost of these commodities declines. Since consumers are usually called upon to bear any increase in the cost of ingredients, they should expect to benefit by reductions in the cost of materials.

CONSUMERS' BOOKSHELF

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tion. 1936, 170 pp. Address: Superintendent of Documents, Washington, D. C. 25 cents. Facts about rural electrification before 1935, rural electrification abroad, the role of the Federal Government, costs, electric rates, laws promoting rural electrification, and cooperative electric distribution.

REA GUIDE. February 1936, 16 pp. Address: Rural Electrification Administration, Washington, D. C. Free. Question and answer method used in explaining the Rural Electrification Administration, its set-up, activities, projects, administration, financial methods, legal assistance, and construction problems. Contains information on electrical cooperatives.

REA POWER. October 1936, 12 pp., illustrated. Address: Rural Electrification Administration, Washington, D.C. Free. A discussion of the organization, functions, and activities of the Rural Electrification Administration. Includes a section on rural electrical cooperatives.

BACKYARD GARDENS

[Concluded from page 10]

onions may be planted as a filler in rows with other early crops, but if one wishes to use the onions only after they are fully grown, they should have a bed of their own. Also, they should not be pulled until the tops have partially ripened. Onions should be stored where it is cool and dry.

No garden would be complete without a few tomato plants. Pritchard, Break O'Day, Marglobe, Bonny Best, Stone, and Ponderosa are favorites for small gardens. The first three of these are resistant to the destructive wilt disease. For an early supply of tomatoes it is wise to start one's plants indoors or to buy them. A cigar box filled with soil makes an adequate seed bed, but as soon as the plants begin to grow, forming two or three leaves other than their seed leaves, they should be transplanted so that each plant will have at least 3 inches of space in both directions. The small tomato plants are ready for transplanting about 2 weeks after the seeds are sown, and it usually takes from 6 to 8 weeks until they are ready to be set in the garden.

Training tomato plants to stakes is recommended for a garden where space is limited.

Good results are obtained from tomato plants by pruning them to a single stem, or at most two stems, and tying them to a stake or trellis. The tomatoes ripen a trifle earlier when this method is used, and the plants are easier to cultivate. Well-cultivated plants, where the midsummer heat is not too intense, will bear throughout the season. Tomatoes are injured by frost, but if the green fruit is picked before it becomes frosted, it will ripen in a room where the temperature is about 60 degrees.

Potatoes, peas, and sweet corn may be favorite family foods, but these vegetables require considerable space. As a rule, it is not advisable to plant them in a small backyard garden. The vine group of vegetables, which includes cucumbers, summer and winter squashes, muskmelons, and watermelons, also requires room to grow, but if one has a fence or trellis, one or two of these vegetables may be trained over it.

Helpful aids to gardening are given in the following Government bulletins: *The City Home Garden,* price 5 cents; *The Farm Garden,* price 10 cents; and *The Subsistence Garden,* price 5 cents. All three may be obtained by writing to the Superintendent of Documents, Washington, D. C.

Our Point of View

The CONSUMERS' GUIDE believes that consumption is the end and purpose of production

To that end the Consumers' Guide emphasizes the consumer's right to full and correct information on prices, quality of commodities, and on costs and efficiency of distribution. It aims to aid consumers in making wise and economical purchases by reporting changes in prices and costs of food and farm commodities. It relates these changes to developments in the agricultural and general programs of national recovery. It reports on cooperative efforts which are being made by individuals and groups of consumers to obtain the greatest possible value for their expenditures.

The producer of raw materials—the farmer—is dependent upon the consuming power of the people. Likewise, the consumer depends upon the sustained producing power of agriculture. The common interests of consumers and of agriculture far outweigh diversity of interests.

While the Consumers' Guide makes public official data of the Departments of Agriculture, Labor, and Commerce, the point of view expressed in its pages does not necessarily reflect official policy but is a presentation of governmental and nongovernmental measures looking toward the advancement of consumers' interests.

DAYLIGHT SAVING TIME

operating in many cities, changes the hour of our national weekly consumer broadcast. Commencing with April 27, this program goes on at 4:15 eastern standard time (5:15 eastern daylight time), every Tuesday afternoon. In this program your Consumers' Counsel and an officer of the General Federation of Women's Clubs bring you useful consumer news each week.

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CONSUMERS' Guide

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Volume IV, No. 4

Copy 1

April 19, 1937

Melons Come to Market

CONSUMERS' Guide

Issued every two weeks by the Consumers' Counsel, Agricultural Adjustment Administration, Department of Agriculture, Washington, D. C.

Vol. IV, No. 4 April 19, 1937

We would like to take a poll of our own. A recent issue of an important trade paper gives some "Don'ts—VERY Special Don'ts" to salesmen of a certain line of rugs. One of these "Don'ts" reads this way: "*No lecturing*, please. A sale is a two-way transaction. Don't bore your customer with an overdose of information. Take a tip from automobile selling. Remember—chromium trim, upholstery, streamlining, and niceties of designing sell a woman an automobile. She doesn't care what's under the hood. Apply this same slant to your (trade name of rug). Discussion of loom weaving, details of construction, and so on, constitute technical jargon that bores most women." . . . Our poll would ask: Does it bore *you*? Or would you like to be able to choose your rug on the basis of information stated on the labels and in the advertising of rugs made by another manufacturer? These labels give facts on weave, materials, content (percentage of wool and cotton), dyes, yarn, pitch (number of tufts per inch across), wires (number of rows of tufts per inch lengthwise), shot (number of weft yarns "shot" across the loom to bind the tufts in the back of the rug). We ask you, What about it?

Watermelons that grow in size like stories about the fish that got away are a bad buy for most household consumers, say experts in the Department of Agriculture. Best value comes in a melon that can be consumed by the family at a single slicing. A melon cut before it is chilled loses quality, and flavor disappears from left-overs. Agriculture's breeding experts at their laboratory near Charleston, S. C., are working now on developing a watermelon to fit the average refrigerator. This is one of the thousands of useful scientific jobs which agriculture's Department is doing for consumers. We tell of another of its melon researches in our story on cantaloups in this issue.

Another boon to farmers and relief families was announced by AAA on April 8, when it accepted bids from 17 companies to supply a total of 7,480,000 pounds of surplus dry skim milk. For 3½ years AAA has been buying up surplus supplies such as these for two purposes: To relieve the pressure on farm prices, and to add nourishing foods to the slim diets of families still dependent on government for part or all of their living. Well over 2½ billion pounds of food have traveled this route to relief family kitchens. . . We reported first egg purchases for this year in our February 8 issue. Latest report of AAA, on April 5, shows more than 8,345,000 dozen eggs, involving an expenditure slightly over $2,000,000. . . Purchases of fresh grapefruit and canned grapefruit juice, too, have been important two-way relief items. From Texas canners close to 400,000 cases were purchased by March 21. Fresh fruit bought from Texas growers up to March 5 this season totaled 1,177 cars. . . All such purchases by AAA are turned over to the Federal Surplus Commodities Corporation which distributes them to State relief organizations which in turn see that the foods get to needy families. . . In 1936 nearly 900,000,000 pounds, made up of AAA purchases and foods obtained by State agencies for this purpose, were added to relief family diets. This meant an average of about 30 pounds per month for a family. Included in the 1936 total were 18,800,000 pounds of meat and meat products; 213,000,000 pounds of cereals and flour; 430,000,000 pounds of canned, fresh, and dried fruits and vegetables; 19,000,000 pounds of milk and cheese; 9,000,000 pounds of butter, sugar, sirup.

Numerous "economic cheats" were uncovered by the Federal Food and Drug Administration's activities during February, its monthly report reveals. (See "Policing Foods for Humans and Animals" in our February 22, 1937, issue.) Seizure was made by the Administration of 3,372 packages of pecan meats in baskets with false bottoms, with the net weight statement inconspicuously displayed on the under side of the container; 456 jars of preserves and jellies low in fruit content; 910 cans of so-called lemon juice, diluted with water; 1,600 pounds of thyme leaves from which most of the flavoring constituents had been extracted; 1,800 sacks of potatoes labeled as of a grade higher than their condition warranted; 390 jars of mustard sauce containing added gum and mustard bran, without any label declaration of their presence; 564 pounds of so-called malted milk found to contain a fat other than butterfat. In addition, 38 cans of cane syrup and 96 cans of sorghum syrup, both short of the declared net contents, and 21 cases of canned soaked dry peas which had on the labels a vignette of fresh green peas and the word "dry" inconspicuously placed, were seized. The following canned goods were seized because they fell below the prescribed legal minimum standards of quality and condition without label notification of that fact: 365 cases of canned cherries, 1,080 of tomatoes, and 295 of peas.

"Human erosion is just as serious as soil erosion, and one of the most important items in preventing human erosion is plenty of good food."

HENRY A. WALLACE,
Secretary of Agriculture.

MELONS *Come to* Market

May is the month for melons to start to market. Cantaloups come first. Here are some buying tips for enthusiasts of this and other popular melon types

To consumer palates, quality in cantaloups means flavor. To consumer pocketbooks, trying to buy well-flavored cantaloups is often a gamble.

Consumers have different ways of selecting this welcome fruit—a source of Vitamins A, B, and C. To judge a melon's ripeness is comparatively easy. Yellowish color beneath the netted surface of some melons, a characteristic musky odor, the blossom end of the fruit yielding to pressure from the thumb, these are indications of ripeness, but not of flavor. If a melon has been picked green and ripened en route to the consumer, it may be flavorless. Ripening on healthy vines is the secret of well-flavored melons.

Best consumer test for detecting a vine-ripened cantaloup is to examine the stem scar. If the scar is smooth, clean, and cuplike it means that the melon was picked at "full-slip" or when ripe enough for the fruit to separate easily from the stem. A melon picked at "half-slip"—or at a less ripe stage—will have some of the stem still adhering. If there is a little secretion of sugar around the stem scar—it is a pretty good indication that the melon is sweet.

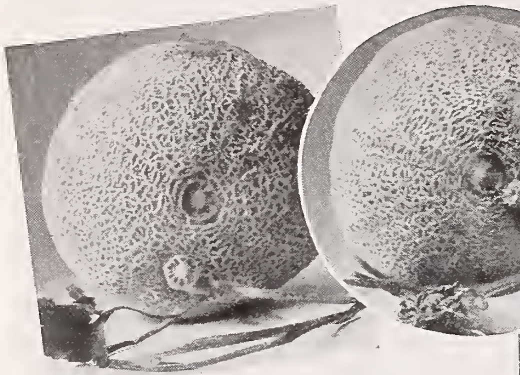
In 1932 and 1933 consumers bought less cantaloups than they did in the twenties. "Depression" is one obvious reason—but the fact that too many melons, picked green and of poor quality, had been reaching the market was interpreted as an important reason for the decreasing demand. Today by improved methods of grading, shipping, and packing, the large western producers are aggressively tackling this problem of getting vine-ripened melons to consumers a long distance from growing centers.

Americans are accustomed to buying many varieties of muskmelons under the trade name "Cantaloups." In reality the cantaloup is a variety of muskmelon common in Italy but not commonly grown in this country. Cantaloup seeds, imported from Armenia, were first cultivated in western Europe in the vicinity of the Castle of Cantalupo, in Italy. We have borrowed the name and use it as a blanket term for many different varieties of muskmelons.

Some varieties of muskmelons consumers know by their correct names. Among them are the Honeydew, the Casaba, and the Persian, sometimes called the Santa Claus. Such melons are larger than cantaloups with more or less smooth rinds which are not netted or deeply ribbed, though sometimes they are furrowed. Their flesh is sweet and juicy, with a whitish, yellowish, or greenish tinge. Another melon, popular in the United States in recent years, is the Honeyball—a cross between the Texas Cannon Ball and Honeydew. Its fruit is round, slightly larger than the Netted Gem and the flesh is thick and green in color.

Over 25 States produce melons in large enough quantities to be shipped to other markets, but the biggest growing centers are in California, Colorado, and Arizona, certain sections of which have climates comparable to the valleys of Southern Asia, the original home of the melon. California alone ships more than half the Nation's market supply of cantaloups and Honeydews. Winter melons, such as the Casaba and Persian, are grown almost exclusively in the West.

Melon season begins in May and lasts well into October, with winter melons, such as the Santa Claus, trickling into the market well into December. In May, western cantaloups come to market. They are followed by cantaloups grown in smaller producing centers along the



When a cantaloup is picked practically ripe or at the "full-slip" stage, the stem comes clean from the melon leaving a cuplike hole. A portion of stem clings to the cantaloup when it is picked at the "half-slip" stage or before full maturity has been reached.

Pickers soon learn to judge the ripeness of a cantaloup by its appearance. The netting on a mature melon hardens and assumes a whitish color, and the dull-green color of the skin usually turns to a lighter shade of green which takes on a yellowish tint as the fruit ripens. In the large western fields bags strapped over the shoulder are generally used for gathering melons. When these are filled they are emptied into crates which are carried at once to the packing shed.

Atlantic Coast in the States of Delaware and Virginia, and still later by those grown in Indiana and Michigan. As a rule, the supply of cantaloups is most plentiful in June when shipments from California usually are heaviest, though seasonal conditions may bring the California crop to maturity as early as the last week in May. Honeydews grown in the same district as cantaloups ripen from 3 to 4 weeks later. Honeyballs come still later and the Casaba does not usually appear on the market till the latter part of September and October.

Prices consumers pay for melons vary a great deal depending on the supply on the market and proximity of the market to growing centers. New York consumers pay more for their California melons as a rule than those in mid-western cities because of the expense of transportation. However, consumers in large cities have a longer melon season. By far the greatest percentage of carlot shipments go to the metropolitan centers than is the case with other important fruits and vegetables. In 1930, 62 percent and in 1931, 60 percent of the carlot shipments of cantaloups and other muskmelons went to cities with populations of over a million people. Consumers in rural communities may find their melon season confined largely to the summer months when home-grown melons are ripe and are sold on the local market.

Varieties of muskmelons found in one's favorite grocery store depend on geography. In many sections of the country a certain variety of muskmelon may be grown and be popular among local consumers, though it is not cultivated for the commercial markets because of its poor shipping qualities. It may be as fine or finer in flavor than many of the varieties which have been developed for sale at distant markets. In certain sections of New Jersey, for instance, the Jenny Lind, a locally grown melon, is much in demand. The Tiptop group of muskmelons is common in Indiana and Illinois where they are grown. The Netted Gem group, developed for the most part at Rocky Ford, Colo., is grown extensively for the commercial market. Hales' Best and Hearts of Gold varieties are now popular with large growers because of their excellent shipping qualities.

Bureau of Plant Industry of the United States Department of Agriculture has developed a new mildew resistant variety of muskmelon, called the M. R. No. 45, which is cultivated extensively in California. The M. R. No. 45 can be ripened on the vine, and then when properly precooled and refrigerated in transit will carry in good condition to markets 9 or 10 days distant. Resistance to mildew is the reason for this variety's increasing popularity. Often mildew killed the vines before the melons could ripen. Consequently melons were picked green and immature and were flavorless when they reached the consumers' dinner table.

Melons require a rather long growing period with plenty of soil moisture up to the time of ripening and then long periods of heat and dry weather. One hundred twenty to 140 days of good growing weather is considered necessary for the production of muskmelons, though if both weather and soil condition are exceptionally good, the crop may mature within 100 days. Heavy rains during the ripening period mean worry to the producer. Moisture at the wrong time affects the flavor and keeping qualities of a crop. It also aids the development of leaf diseases which growers are constantly fighting.

Only a small portion of the grower's worries are over when he has successfully raised his crop. Gathering, handling, and packing are of the utmost importance if he is to get a good price for his labor. Stage of maturity at which melons are picked depends on the time elapsed before they reach the consumer. When motor-truck transportation is used and melons will reach the retail market the day after they have been harvested, they can usually be allowed to ripen on the vines. However, melons from the West do not reach the eastern market for at least a week or 10 days after they have been gathered. Even in refrigerator cars melons will ripen in transit. Though most melons sent from West to East are picked at the half-slip or hard-ripe stage, some of the large California growers, using the "precooled" shipping method succeed in sending vine-ripened melons to New York. Precooling means simply that the temperature of the refrigerator car is reduced to 45 or 50 degrees after it is loaded and before it begins its trek across the country. This rapid change in temperature takes the heat out of the melons at once so that they stay at the same stage of ripeness for several days.

Precooling of vine-ripened Honeydews is not as common as precooling of cantaloups and Honeyballs, possibly because the Honeydew is a better keeping melon. Both Honeydews and Honeyballs, when vine-ripened, take on a cream or light yellow shade; but the change from greenish to lighter shade is somewhat dependent on soil conditions and cannot be a sure consumer test of ripeness. However, vine-ripened Honeydews and Honeyballs have a softening at the blossom end, the ridges adjacent to the stem are well rounded and smooth, and the odor is characteristic of a ripe melon. Honeydews are usually clipped from the vine leaving about one-half inch stem attached to the melon.

Honeyballs and Honeydews are slower in maturing than cantaloups. In hot weather, Honeydew fields are gone over three or four times a week, but during the height of the ripening season for cantaloups, that crop is harvested at least once, sometimes two or three times a day. Many growers do their picking early in the morning before the melons become heated, or when the crop is to be sent by motor truck, they are gathered at sundown and sent on their way the same night.

Development of motor transportation and increase of automobile travel have stimulated roadside marketing of melons. Often these roadside stalls do a flourishing business, handling vine-ripened melons grown in the surrounding 60- to 100-mile area.

Little time as possible must be lost in packing and grading melons for market. In the large growing centers of the West, melons are often trucked directly from the field to the central packing shed which is usually on a railroad siding. Here they are graded, packed, and loaded on the cars. These permanent sheds are used by growers' associations and by western shippers who contract growers for large acreages. The crop is referred to as "shed-pack" in contrast to "field-pack" stock. Field-pack melons mean that the grading and packing has been done in a temporary shed in or near the field. In eastern, southern, and midwestern districts farm buildings are often used, or the work is simply done under the shade of a tree. The important thing is to protect the melons from the sun when once picked and to get them packed for market as quickly as possible.

Quality standards have been defined for melons, as for many other fruits and vegetables, by the Bureau of Agricultural Economics. These grades help principally growers and the trade, however, because they do not appear on the individual melons as consumers usually buy this fruit. A container of "U. S. No. 1" grade cantaloups must measure up to the following qualifications: The melons must be firm and mature—meaning that they must have reached a stage of development which will insure proper completion of the ripening process. They must be free from cracks, sunburn, decay, and from damage caused by dirt, moisture, hail, disease, and insects. Ten percent by count of the melons may be below the requirements of this grade but not over 5 percent of this tolerance may be allowed for any one defect and no tolerance is allowed for decay.

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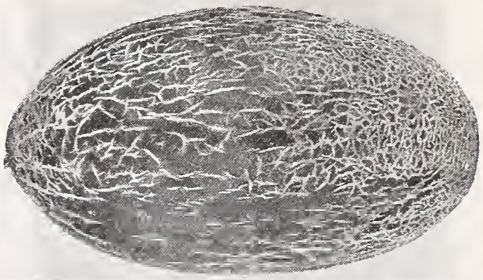


Persian Odessa melon (top), sometimes known as Santa Claus Melon, has best keeping qualities of all winter melons grown in this country. Honeydews (below) are generally considered ready for harvesting when the color of the skin has changed from dark green to a light green or whitish shade and when the skin of the melon loses its slightly fuzzy feel and becomes smooth.

Headquarters of the Finnish Wholesale Cooperative Society at Helsingfors.

Industry and Government are not alone in their researches for better quality in food. Farmers are using their cooperatives to improve the quality of products sold and to put higher standards into practice. Here are some examples culled from a report on European agricultural cooperatives by the International Labor Office in Geneva

COOPERATING

for Better Foods

Stepping up the quality of their products has long been a major concern of American farmers. By improving the quality of their products farmers have hit upon a technique that not only assures them of more certain incomes, but one which also enables them to give consumers better values for their money.

Egg cooperatives are a case in point. Scientific methods, adopted by cooperatives, have contributed much to the quality of eggs. Turkeys, walnuts, citrus fruits, apples, and many other farm products are better quality products today as the result of the cooperative efforts of American farmers.

Agricultural Adjustment Administration in its marketing agreements with growers and shippers has helped to carry on the work started by many cooperatives in encouraging shipments of top-quality foods to markets. We told the story of quality control by marketing agreements in "Another Road to Consumer Standards", in the Consumers' Guide for December 31, 1934.

Side by side with American farm cooperators, European farm cooperators, too, have worked toward better quality foods.

An Englishman, it is said, sitting down to his breakfast egg imported from Denmark, can, if he chooses, tell whose hen in Denmark laid it. Practically every Danish egg sold abroad is rubber stamped with a code number indicating its source.

Danish poultrymen have not always stamped their eggs. There was a time when Danish farmers would not have dared to identify themselves to the final purchasers of their eggs. Before the establishment of the Danish Egg Cooperative Export Society in 1895 Danish eggs reached the English consumer only after a long and hazardous journey. Farmers sold their eggs to private traders, who in turn sold the eggs to exporters. Sometimes these producers found it to their profit to wait for price increases. While they waited the eggs aged. Sometimes the delay was repeated with the private trader with lamentable results to the quality of this highly perishable food.

Cooperatives in Denmark now collect eggs from cooperators once a week. The eggs are taken to a central depot where each egg is candled. Then they are classified by quality, sorted by size, packed carefully, and shipped to the market as quickly as possible. Twenty-five percent of Danish egg exports are handled by cooperatives in this manner. The cooperative stamp guarantees to the consumer a high-quality egg. Where stamped eggs are known the demand for them has grown.

"Sun" eggs are as famous in Norway as are Danish eggs in Great Britain. They, too, carry a cooperative guarantee. Norwegian cooperators in the Norwegian Consumer Egg Export Association began to stamp eggs 40 years ago with numbers to identify their actual producers. Because of their consistently good quality, so popular did these stamped eggs become that private producers took to stamping their eggs with numbers similar to the cooperative stamps. They failed, however, to make that stamp mean a guarantee of quality.

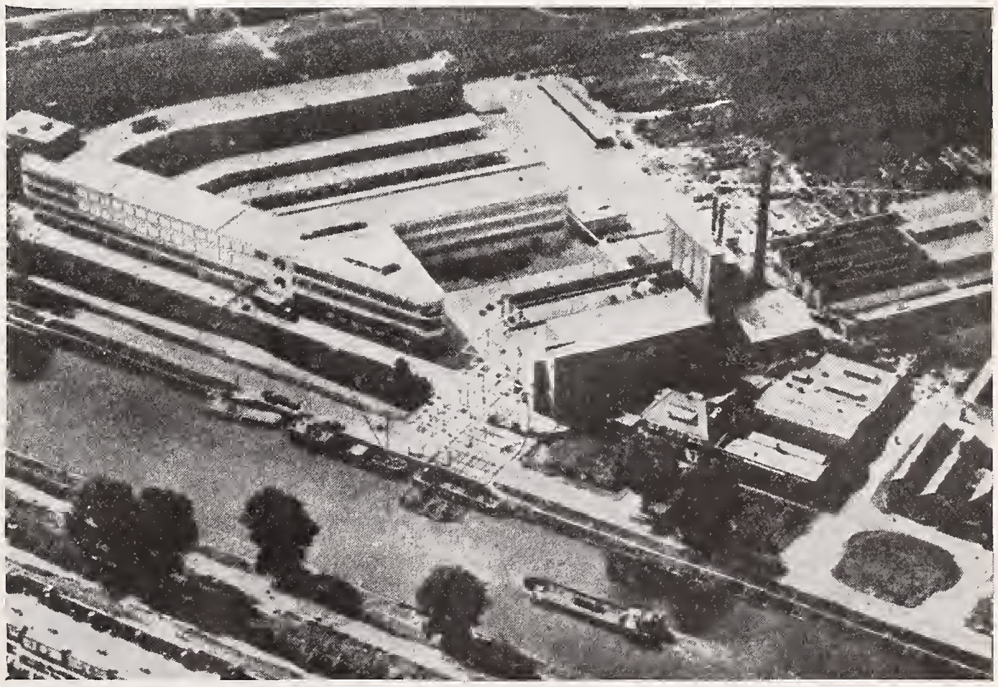
Cooperators, not content to leave their customers with uncertainty as to the quality of their products, looked to other devices which would help consumers to distinguish their quality eggs. This time they chose a symbol of the sun to represent top grade. This mark was registered and used on eggs of a guaranteed quality. More recently Government control of eggs has been instituted as the result of the experience of the cooperatives. Standards for "Sun" eggs have come to be used by the Government to define a high quality egg.

Lur brand butter provides another example of the evolution of legal standards for food from the efforts of cooperatives to improve the quality of their commodities. The Lur brand is the Danish Government's guarantee of the quality of exported butter. No butter may leave Denmark without this brand. The Government's carefulness in the award of the brand has become the consumer's assurance of the high quality of the commodity.

Lur brand came into existence in 1900 as a result of the efforts of the National Association of Dairies, a cooperative of Danish dairy farmers. Until 1906 the right to use the brand was granted to any dairy that agreed to conform to certain standards of butter making. Then, however, a law was passed regulating the use of the brand. Standards for butter making, first formulated by cooperators, became the basis of legal definitions of quality. Numbered labels issued to dairies and creameries measuring up to these legal requirements are affixed to their products thus enabling governmental authorities to trace all butter to its source in the event of complaints.

Only pasteurized cream can be used in making Lur brand butter, which may not contain more than 16 percent water, nor less than 80 percent butterfat. No preservative other than common salt may be used. Adulterants and aniline dyes are forbidden. Furthermore, the butter must satisfy certain minimum standards of flavor and appearance.

Butter from all dairies is examined periodically by three judges. In making its inspection, this board examines samples which are held until the butter is the same age as the butter as it is sold to consumers. If the butter is judged of inferior quality its producer is advised to consult with a Government expert in butter making. This expert, whose services are free, inspects the producer's dairy in an attempt to discover the cause



The Dutch Cooperative Wholesale Society owns these factories at Utrecht.

"All cooperators have the same rights", "The cooperative motto: The best quality, exact weight, fair price" . . . two of the slogans used on posters displayed in French cooperative establishments.

for the inferior product. After the dairy expert has been consulted a period of grace is given to enable the producer to correct the condition responsible for the faulty butter. The butter is then judged again and if it remains inferior on its second testing the right to the use of the brand together with the right to export his product is denied to the producer. In cases of violation of specific regulations the producer may be punished by fines, imprisonment, or the seizure of his products.

Mere brand marks do not make good butter; stamps do not improve the quality of eggs. There are symbols of cooperative efforts to improve quality at every stage of the life of a farm product from the farm to the consumer. Complete information on the work which agricultural cooperatives are doing to improve food quality has not yet been compiled. Examples of such activities in this article are drawn chiefly from a publication of the International Labor Office, "The Cooperative Movement and Better Nutrition." These examples are intended only to indicate the variety and scope of the measures cooperatives have undertaken.

Once cheese in Finland was a product of rule of thumb methods. Today, Valio, the export organization of all dairy cooperatives in Finland, maintains two cheese-making institutes where cheese makers are trained in scientific methods. At its five-story laboratory it maintains a staff of chemists and bacteriologists who study cheese making and the bacteria which ferment milk to produce cheese. Valio, which handles 58 percent of Finland's cheese exports, not only makes available to producers the latest scientific methods, it also seeks to improve food quality by rewarding dairymen who produce milk, butter, and cheese of high quality, and by penalizing those who produce inferior products. Bonuses are given to cheese makers whose cheeses are judged to be of high quality. Money prizes and certificates are awarded to dairymen who develop improved methods of dairying. As in Norway and Denmark, the Finnish dairy cooperatives first regulated the manufacture of dairy products. From 1905 to 1913 the only supervised butter in Finland was that produced by the cooperatives. In 1913 when the Government passed a law providing for supervision over all butter it based the provisions of its law on those of the cooperative.

Danish Cooperative Bacon Factories, which slaughter 85 percent of all the hogs raised in Denmark, control the quality of the bacon produced in their factories by paying farmers for pigs according to quality. Production of inferior meat is punished by reduced prices, with the result that today farmers take great care to raise only first-class pigs. Farmers are instructed to provide fresh air for their pigs, to disinfect pigsties, and to inspect their pigs regularly to prevent diseased animals from infecting healthy ones. All pigs are carefully examined by veterinary surgeons, and faulty animals are either wholly or partially rejected as unfit for human consumption.

In Holland the Union of Consumer Dairy Societies gives examinations and diplomas to dairy technicians. In 22 years it has had more than 3,400 candidates at its examinations and has issued 1,400 diplomas.

Decorations and medals go to cooperative farmers as well as soldiers in Lithuania. The Central Union of Cooperative Dairies there each year has a competition in which the three prize winning milk producers receive decorations from the hand of the President of the Republic.

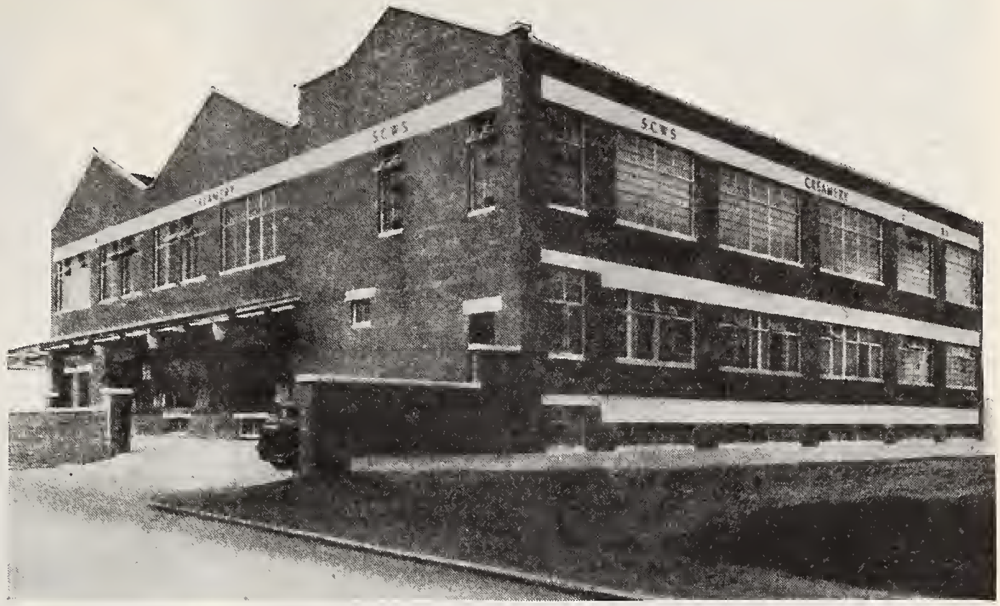
Norwegian butchers whose meats appear on the market in a top condition receive quality prizes from their cooperative, the Norwegian Central Union for the Marketing and Export of Pork Bacon. Diplomas are awarded to producers of quality products, and an additional amount per pound over the market price is paid for high quality pork.

Food begins with the soil and the seed, and the cooperatives take active measures to improve both. Valio, the Finnish cooperative society dairy expert, supplies cooperators with bacteria from its laboratory for the improvement of their soil. Twenty-five thousand acres of meadowland have been enriched by the use of nitrogen-producing bacteria; 10,000 of these acres have been converted into model pasture land.

Seed cooperatives supply farmers with selected seed in almost every European country. These cooperatives maintain experimental stations where new plants and selected strains are developed. When Czechoslovakian barley growers were faced with the loss of their export barley trade as the result of changing tastes in beer, Selecta, their seed cooperative, developed a new barley which enabled them to retain their market.

Danish growers, before the formation of their Danish Agricultural Seed Supply Association, discovered that clover seed purchased from private seed merchants often contained as much as 30 percent powdered quarry stone. Good seed was adulterated with poor or dead seed. Today, through their seed cooperative, they secure high quality tested seed. The cooperative also encourages farmers to exchange selected tested seeds with each other.

Diseases of plants and animals are the enemy both of good quality commodities and farmers' incomes. Here on an international scale the agricultural cooperatives have displayed their effectiveness. Scientific disease and pest control is expensive, and even though governments maintain laboratories and experts, often the application of the knowledge thus acquired is too expensive for the individual farmer. The loss from diseased animals, too, often bears ruinously on individual farmers. French cooperative societies condemn cooperators' diseased cattle and compensate them for their loss. Farmers and consumers are thus insured, the farmer against loss and the consumer against contaminated foods. Farmers' cooperatives provide this insurance in Denmark and Luxembourg as well as in France.



One of the two new creameries recently built by the Scottish Cooperative Wholesale Society. This one is located at Stranaer, Scotland.

Improvement of animal stock is also a minor concern of cooperatives. First-class hogs must be bred to produce first-class bacon or pork. Cows must be bred to produce milk with a high butterfat content. To improve the quality of milk in Denmark records are kept of 545,833 cows, 35 percent of all the cows in the country. The kind and amount of feed consumed by each animal is recorded and checked against its milk production, and the quality of its milk is noted. Exceptionally high-grade animals are then selected for breeding purposes. Thoroughbred bulls are placed at the disposal of all cooperators. Similarly, horse-, pig-, and sheep-breeding societies provide the same services to their members.

Changing consumer tastes present farmers with additional problems. Smaller cattle are now raised in Great Britain than formerly, since housewives prefer smaller roasts today. Denmark once produced fat, heavy pigs for the German market, but suddenly as a result of trade conditions the market was closed to Danish growers. Farmers found themselves raising a type of pig for which there was no market. Through the work of their breeding experts, however, a leaner, longer, lighter pig was developed, one suitable for bacon, which enabled Danish growers then to enter the English market.

Influence of agricultural cooperatives on food standards has been greater than the actual volume of their business. Although only 25 percent of Danish export eggs are cooperatively produced, all eggs exported must maintain the standards originally set by cooperatives. Danish butter, bacon, and eggs, Norwegian eggs, Finnish butter, milk, and cheese, all these products are now subject to Government legislation as the result of the pioneering of agricultural cooperatives.

Consumers' cooperatives in Belgium, Finland, France, Hungary, Poland, Switzerland, and Yugoslavia buy farm products today only from agricultural cooperatives. Recognition is thus given by both the consuming and producing cooperators to their identity of interest, and today more and more they are working together that both may benefit.

GROCERY CLERKS TEST THEIR KNOWLEDGE

—the novel technique used by a Virginia Weights and Measures official to protect consumers in his city against short weights

A MOVIE started the idea. It was a picture showing what happened in a certain Weights and Measures bureau. Evidently it was an eye-opener to the commuity for after its showing the local guardian of full measures was kept busy for days answering all the questions and complaints that flooded in on him.

So amazed at the ignorance of the work of his office was this Virginia official of Weights and Measures, he felt that something ought to be done! First thing he observed was that many of the mistakes which had come to light—thanks to the new interest consumers took in one of their most important local government services—could be traced to the ignorance of clerks in the stores. Here, decided the official, is where education should start.

Most communities in this country have an officer in charge of weights and measures. He may be a county, township, or city official. Sometimes he is called a "sealer"; sometimes, a "Commissioner of Weights and Measures", or some similar name. How broad his powers and duties are varies from State to State. How well he does his job depends on how good a job consumers want him to do.

If the packages that go into consumer market baskets are to be honest in weight and fill, sellers of goods must know the rules and regulations of local and national governments on correct weighing, on proper labeling of weights, on proper fill of containers. Most apt to be well informed are manufacturers, distributors, retailers. Big gaps sometimes show up in clerks' store of facts about official regulations.

Setting out to remedy this ignorance in local store clerks, the official worked up a contest plan. His plan was this: All the grocery clerks of the city were to be invited to enter a contest to see which one of them could best answer 24 questions testing their wits and knowledge of Weights and Measures work. A clerk with a perfect score would get 250 points—10 points for each correct answer, 5 for neatness, and 5 for clarity in reply.

Prizes were to be offered—$20 for the best paper, $10 for second best, $7.50 for third. Two weeks for replies were to be allowed.

Before launching his contest plan, the official talked it over with the grocers of the city. Many of them were quick to give their approval. One local wholesaler sitting in on the meeting told how a deal, which meant dollars to him and better values to the customer, came about because his salesman had learned the habit of reading labels.

"I was selling a certain hotel mackerel by the tub," he recounted. "One of my men, endeavoring to secure another order from this hotel, was informed that they had a better price. There was a difference of 50 cents a tub. The salesman in his efforts to make a sale visited the hotel and found the very same brand of mackerel, but he read the label and found it stated 40 mackerel, while his tub contained 50. With mackerel selling at 3 for 25 cents, in shifting its purchases the hotel was losing 4 mackerel instead of saving 50 cents."

Here are the 24 questions which the Weights and Measures official, with the backing of the grocers, posed for the grocery clerks:

1. What is weight?
2. What is money?
3. What does the stock in your store represent?
4. What difference is there between a bank teller and grocery clerk?
5. Which is of most importance: Correct weight or correct change?
6. Who is affected the most by an intentional short weight, the clerk or the purchaser? Why?
7. At what point on the scales should the indicator or hand be when the scale is not in use?
8. Can anyone who is not blind help seeing that the scale is out of balance?
9. Where should a scale be placed in the store, and why?
10. What lesson or lessons can you learn from the goldfish?
11. How should all commodities not liquid be sold?
12. How should liquid commodities be sold?
13. When may dry measures be used?
14. What is the difference in a store-prepared package and an original package and how should they be marked?
15. What is meant by net weight? Give an example.
16. What percentage of your customers pay attention to the weighing of their purchases?
17. What percentage of your customers pay attention to the labels?
18. A miller had a stone which weighed 40 pounds. A bad boy let the stone fall and it was broken into 4 pieces. The miller discovered that with the 4 pieces he could weigh anything from 1 pound to 40 pounds. What was the weight of each stone?
19. Why do we have Weights and Measures officials?
20. What should be done to a scale before it is put into use?
21. What should be done with a scale that gets out of order after it is sealed; should you wait for the inspector?
22. What relationship should exist between the proprietor, the clerk, and purchaser? Give an illustration.
23. In what manner may the following articles be sold: (1) oysters, (2) cheese, (3) turnips, (4) apples, (5) butter, (6) fish, (7) eggs, (8) vinegar, (9) hams, and (10) sauerkraut?
24. Should a dirty scale be condemned? Why?

Although the judges had a sample sheet of correct answers to guide them through this rich mixture of fact and fancy, latitude was allowed the contestants for originality and clear thinking. There was much scratching of heads and biting of pencils before the clerks consigned their entries to the mails. One question, at first glance wholly unrelated to the merchandising field, taxed the wits of many, left others as much at sea as the animal under discussion. To the question, "What lesson or lessons can you learn from the goldfish?", the prize winner submitted: "The gold fish keeps his scales clean and bright, the grocery clerk should do likewise. The gold fish swims around in a circle, exactly what the clerk should not do."

Seven contestants came a cropper over the query: "Which is the most important: Correct weight or correct change?" and were caught in the admission that correct weight is more important than correct change. The shopper who buys from these clerks had best count her pennies. All gave correctly the relationship which should exist between the proprietor, clerk, and purchaser—one of mutual benefit.

Correct answers, prepared by the Bureau of Weights and Measures, were given as follows:

1. Weight is a measure of the force of gravity tending toward the center of the earth.
2. A medium of exchange.
3. Its equivalent in money.
4. A bank teller handles money and a clerk handles its equivalent.
5. Equal importance.
6. Clerk. Because he sells his birthright with the short weight.
7. At zero.
8. No.
9. In full view of the customers. They have a right to see the weighing as well as the clerk.
10. Goldfish keep their scales clean and live in the clear.
11. By weight, count, head, or bunch.
12. By liquid measure.
13. By mutual agreement in writing, and standard hampers, berries and small fruit in climax baskets.
14. A store-prepared package is prepared in store by clerk before sale.

An original package is prepared by the manufacturer. Both should be marked with their net contents in a clear and distinct manner.

15. Net weight is the commodity itself; no paper, carton, box, or other covering can be included. One pound of butter net is butter free from tray or other covering.

16. . . . .

17. . . . .

18. One, three, nine, and twenty-seven pounds, respectively (there might be other weights).

19. To regulate methods of sales and to protect buyer and seller.

20. It should be inspected and sealed.

21. It should be repaired and re-sealed. No.

22. Fairness; justice to each.

23. (1) liquid measures, (2) net weight, (3) count, weight, or bunch, (4) count or weight, (5) net weight, (6) weight or count, (7) weight or count, (8) liquid measure, (9) net weight, and (10) net weight.

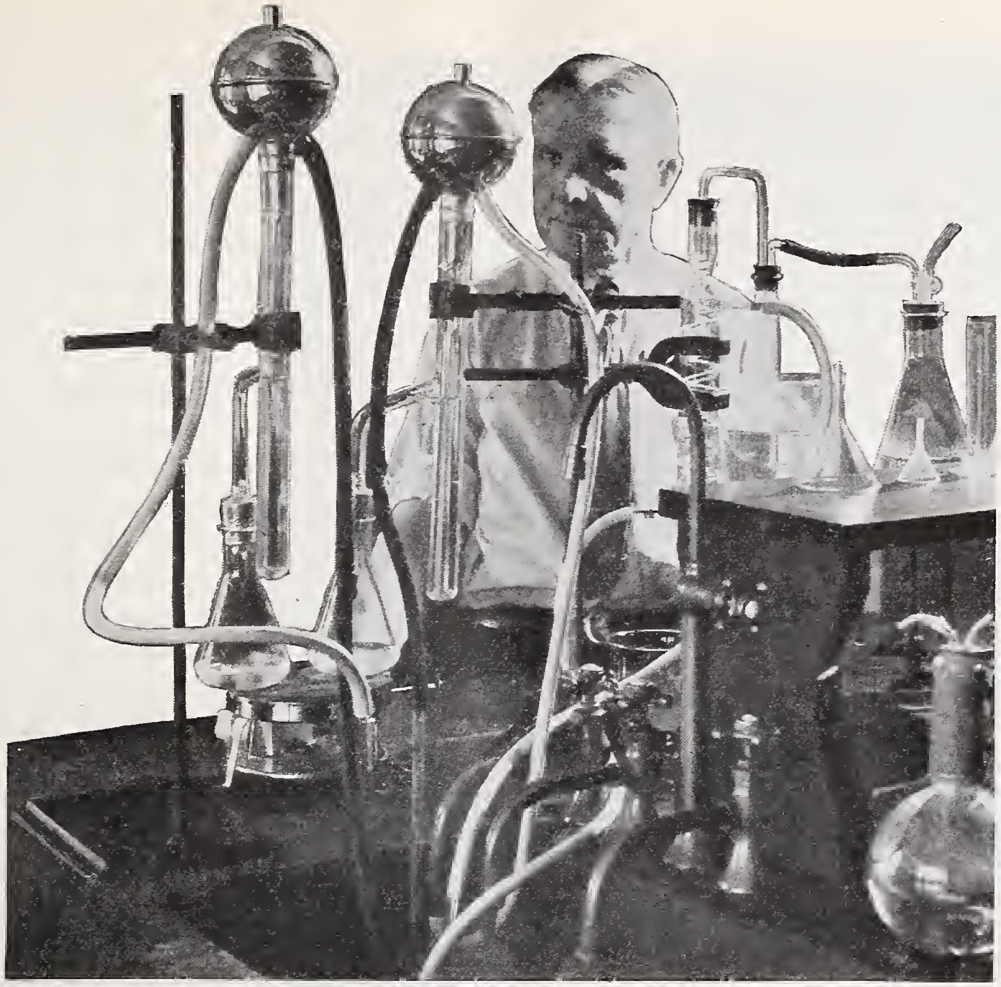
24. Yes, as it causes inaccuracy.

"What percentage of your customers pay attention to the weighing of their purchases?" brought this commentary on consumer shopping habits: Customers who watched the weighing and read the labels ranged from 5 percent to 95 percent throughout the city. The percentage varied in different sections—63 percent of the people of the north side watching the scales and labels as against a bare 10 percent on the south side. In this latter district it would seem that the consumer rather than the salesman was in need of a program of education.

In fact, just such a consumer contest is being planned by the League of Housewives of Richmond for the benefit of their members. So successful has the Bureau of Weights and Measures judged the grocery clerk's contest that it is busy formulating questions for the second of its series of examinations—this time for service station operators and attendants. Perhaps other cities will take a leaf from the book of this Virginia city and scatter sets of questions that will send their customers and salespeople to brushing up their knowledge of these standards of pioneers in buying and selling.

Best way to get posted on weights and measures is to call on the weights and measures official in your own community. For background reading in preparation for this visit we suggest a booklet issued by the National Bureau of Standards which describes the functions of a weights and measures official. Included also is a model State law on the subject of weights and measures. Title of this handy little volume is "Weights and Measures Administration", by Ralph W. Smith. Address: Superintendent of Documents, Washington, D. C. Price 70 cents, by post-office money order.

Most States and many municipalities have laws or regulations requiring packaged foods to be marked with the net weight of the contents of the package. Do you know what the laws in your community are?



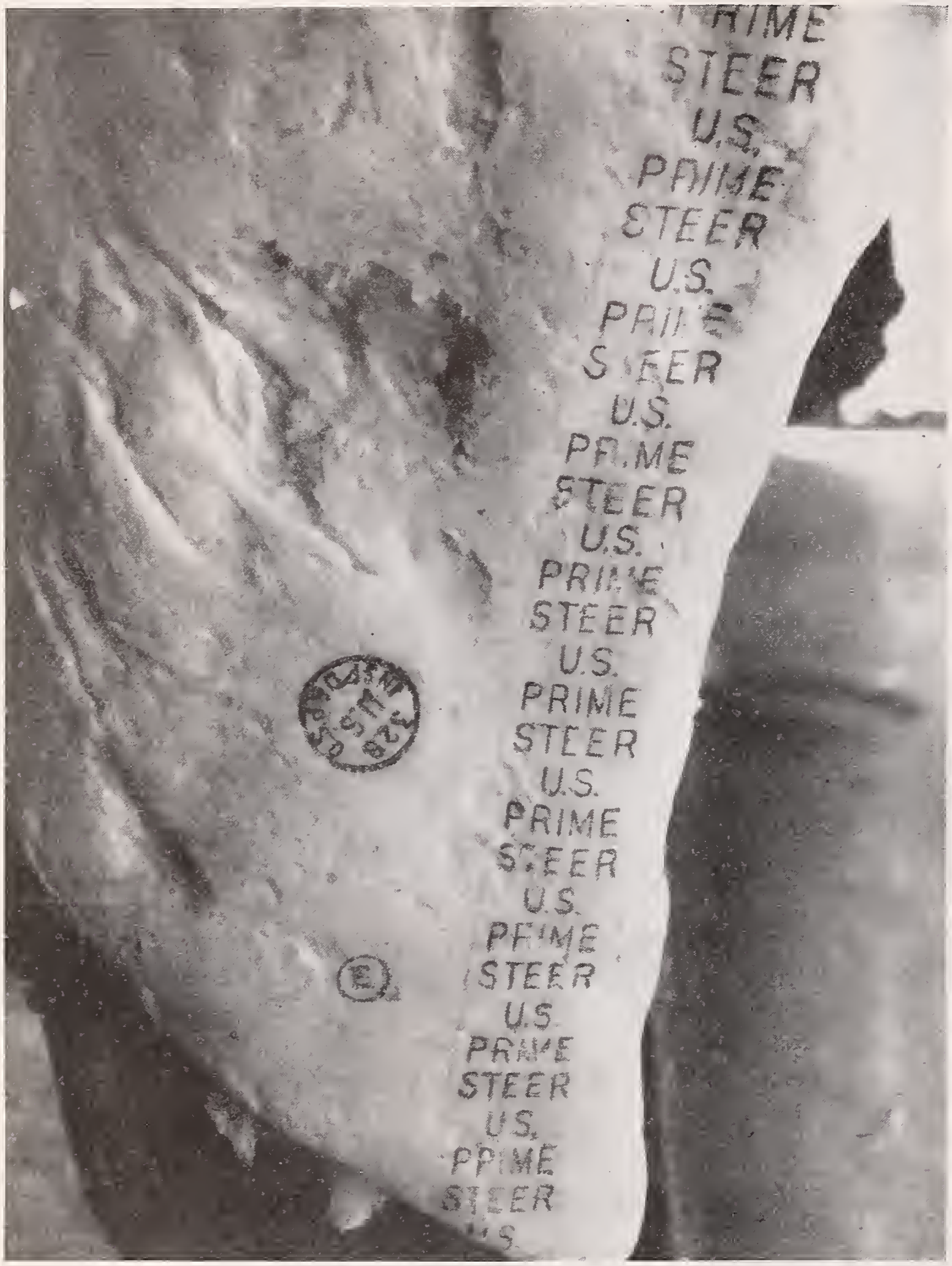
WHAT KIND OF SAFEGUARDS?

Control over the wholesomeness, quality, and labeling of foods by the Federal Government takes many forms. During the past three years, the CONSUMERS' GUIDE has separately described many of these various types of control. Here we summarize them in one article to give our readers a comparative picture of Government on the food front

FEDERAL safeguards for the household buyer of foods and beverages fall into four distinct categories: Supervision of the manufacture of a product, regulation and policing of statements on labels, establishment of quality standards, and policing of products after they are placed on sale.

Some of these safeguards are there to be used if a manufacturer chooses; others are mandatory. Protection may occur at the point of manufacture or it may not be operative until goods appear on the market and someone questions them or their labels. In some cases the regulation of statements on labels is positive in requiring the truth to be stated; in others it is negative in barring falsehoods from the label. Some standards are concerned solely with the wholesomeness of a product; others are concerned with differences in quality of goods which are accepted as wholesome. Some quality standards merely define a minimum grade; others define gradations from highest to lowest.

Only laws to require the inspection of food products during processing are the United States Meat Inspection Act of March 4, 1907, and acts supplemental thereto. First Federal Meat Inspection Act was passed in 1890 at the request of the meat-packing industry. American meat at the time was denied entry to many foreign countries because it was unac-



More consumers are asking for, and more dealers are offering, Government quality graded meats. This piece of beef has been inspected by a Department of Agriculture grader and stamped as "U. S. Prime Steer," top quality in beef grades.

companied by a Government certification of its wholesomeness. To secure these foreign markets for their products American meat packers asked for the establishment of a Federal Meat Inspection Service. This law applied chiefly to exported meat and meat products. The present basic Meat Inspection Act came into being as the result of the widespread public demand for better protection to United States consumers.

This law provides for inspection at the source—that is, for Federal supervision of the entire process of manufacture. Every product bearing the approval stamp of the United States Meat Inspection Service has been derived from animals slaughtered at and the meat processed in a federally approved plant, by federally approved methods, of federally inspected ingredients, under the direct supervision of a Federal inspector. The full cost of this inspection is paid by the Government and costs less than seven one-hundredths of a cent per pound of meat.

Today all meats and meat products—except those produced and sold by farmers and under special conditions by retail butchers and dealers—prepared for the channels of interstate commerce must bear the round purple stamp or other mark of inspection. These approved stamps and other marks of inspection to show that the article has been United States Inspected and Passed are a guarantee of wholesomeness. They signify nothing concerning the tenderness or flavor of the meat.

Imported meats and meat products are subject to the same regulations as domestic manufactures. During 1936 more than 170 million pounds of meat and meat-product imports were inspected by the Meat Inspection Service; 626 thousand pounds were refused entry to the United States, either because they were unfit for consumption or because they were adulterated, misbranded, or otherwise below United States standards.

Not all meat and meat products found in butcher shops are processed under the supervision of the Federal Government. Only about two-thirds of meats and meat products sold at retail are examined by the United States Meat Inspection Service. The remaining one-third is subject to inspection, if it exists, by local and State authorities. For complete protection consumers must look to their own States and cities for adequate laws and effective inspection services, as well as for the United States legend.

Poultry and poultry products do not come under the mandatory provisions of the Meat Inspection Act. No law requires the processors of poultry products to have Federal inspection of their plants. Nor are they required to have sanitary inspection of their products. But today most canned chicken products bear the legend "U. S. Inspected and Certified by the Bureau of Agricultural Economics, United States Department of Agriculture." Full-drawn chickens sold in some cities, too, are likely to bear this mark.

Voluntary action on the part of poultry processors procures this guarantee for consumers. Inspection service is authorized in annual appropriation acts; the act for the current year was approved June 4, 1936. Under this authorization the Department of Agriculture can investigate and certify the class, quality, and condition of certain farm products.

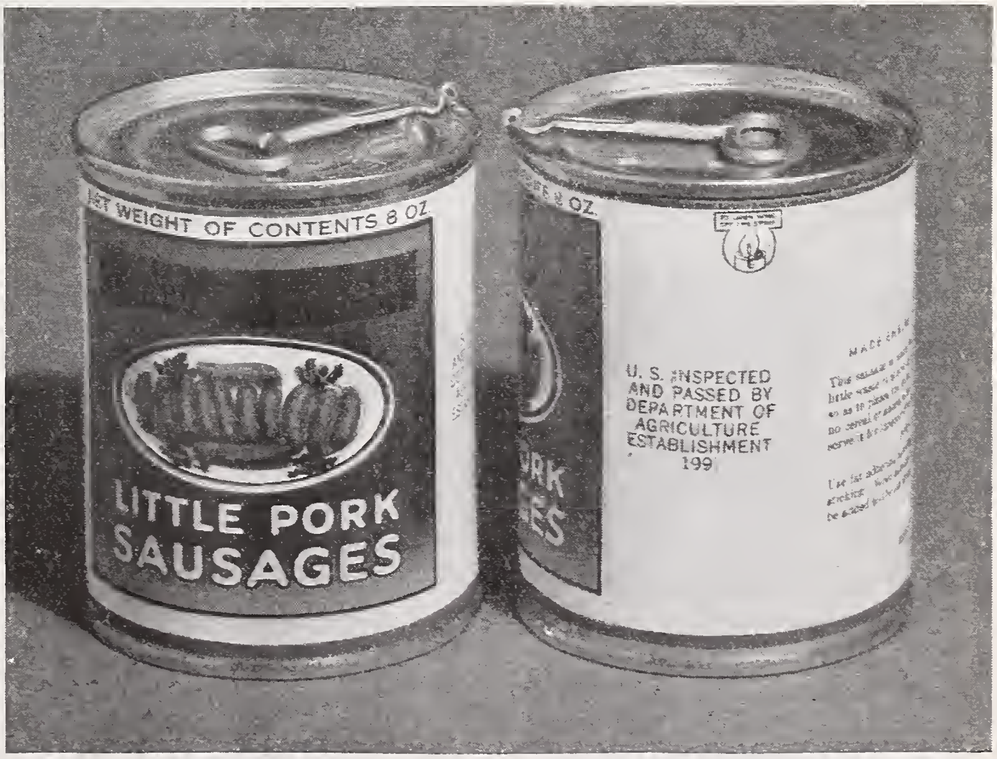
To obtain this inspection service a processor must agree to abide by the regulations of the Department of Agriculture. These regulations are similar to those in effect under the Meat Inspection Act. The processing in poultry plants which have elected to have Government inspection is always supervised by a graduate veterinarian.

Not only the poultry itself is inspected but all ingredients which go into the making of poultry products must also be inspected and approved. Thus an approved chicken soup contains only inspected and approved ingredients, such as rice, celery, condiments. So, too, with all other United States inspected poultry products.

Cost of this service, unlike that of meat inspection, is paid for by the processors, but the supervision and selection of the inspecting staff is under the control of the United States Department of Agriculture, Bureau of Agricultural Economics.

Inspection of poultry products, like meat inspection, first came into existence as the result of packers' attempts to export their canned poultry products. Some countries refused to accept such exports until they received a certification from the Department of Agriculture as to the wholesomeness of the product. From this beginning the inspection of canned poultry products has spread until today practically all canned poultry products are United States inspected.

Only food which must, by law, be inspected during processing, is meat sold in interstate commerce. The round purple stamp on meat, shown on the beef on the opposite page, means it has come from an animal slaughtered at, and the meat processed in, a federally approved plant, by federally approved methods, under the direct supervision of a Federal inspector.


WEIGHT OF CONTENTS 8 OZ
LITTLE PORK SAUSAGES
U. S. INSPECTED AND PASSED BY DEPARTMENT OF AGRICULTURE ESTABLISHMENT 199

Not only the product in the can but the label on the can must be inspected and passed by Federal agents in the case of meats sold in interstate commerce. Note, too, the "net weight of contents", required by the Federal Food and Drugs Act on all containers of foods moving in interstate commerce.

Gradual growth of inspection of full-drawn chickens is also noticeable today as the result of ordinances in New York, Chicago, Los Angeles, and some other cities requiring all chickens shipped into local markets to carry with them inspection certificates.

Shrimp, like poultry and poultry products, are today packed under the supervision of Federal inspectors. Twenty-five thousand cases of uninspected shrimp, with an approximate value of $100,000, were seized in 1933 by Federal food inspectors before Federal inspection of shrimp canneries was instituted. Each seizure added to the apprehension of the industry, and the consequent falling off in purchases of canned shrimp by distributors reflected a loss of confidence in the wholesomeness of the product. Shrimp packers, alarmed at the decline in sales, then decided that it would be best to have their products inspected at the canneries and to place only safe food on the market. They sponsored the passage of the sea food amendment to the Food and Drugs Act, which gave the Secretary of Agriculture the power to grant the request of any packer of sea food for the service of Federal inspectors to carry out a thoroughgoing and continuous inspection of their plants to prevent the packing or preparation of sea food which is not sound or wholesome or which fails to conform to the requirements of the law. The orginal amendment provided that the cost of this inspection should be borne by the packers, but in 1935 another amendment was passed to permit the Federal Government to share the cost of this inspection. Neither in that year nor in the following was money appropriated to pay for the Government's share. Despite this fact, so satisfied were the shrimp packers with Federal inspection of their product that they assumed the full cost themselves.

Most canned chicken products bear a Government inspection stamp; full-drawn chickens sold in some cities, too, bear this mark. City ordinances sometimes require all chickens shipped into local markets to carry inspection certificates.

Consumers showed their appreciation of the measures taken to protect them by exhausting packers' stocks of canned shrimp in 1935, although one of the largest packs in the history of the industry had been put up. Canned shrimp put up under rigid inspection requirements is entirely wholesome. No federally inspected products were seized during 1936.

Federally inspected canned shrimp bears the legend "Production Supervised by U. S. Food and Drug Administration" and is the consumers' guarantee of wholesomeness. Shrimp inspection under the plan now in force provides for supervision of shrimp packing from the boats which trawl these delicious crustaceans from the sea to the final shipping of the canned shrimp from the cannery. At every stage in the packing of shrimp there is a Federal inspector examining not only the shrimp itself but also the method of handling and the workers and machinery used.

Federal shrimp inspectors are Civil Service appointees. They must be college graduates with scientific training, preferably in chemistry or bacteriology. Today a force of 57 inspectors supervises factories in Texas, Louisiana, Alabama, Georgia, and Florida. The service also maintains in New Orleans a chemical and bacteriological laboratory to detect defections that might escape the unaided eyes of inspectors.

No law requires that shrimp packers submit to United States inspection. Their cooperation with the Food and Drug Administration is wholly voluntary; no penalties are imposed upon noncooperating packers. Only compulsion upon packers to obey the inspection regulations is the knowledge of the packer that if he does not cooperate fully the inspection service will be withdrawn. Today 50 of the largest canners in the United States, packing between 90 and 95 percent of all United States shrimp, have United States inspection in their plants. Packers of other sea foods could, if they wished, avail themselves of these inspection services under the provisions of the Food and Drugs acts. To date no other packers have done so.

Number 1 consumer safeguard—the continuous supervision of the manufacture of food products—has been achieved, then, in three separate industries: In the meat and meat-products industry, in the poultry-products industry, and in the shrimp industry. In the first case, the supervision is required; in the latter two it is voluntary.

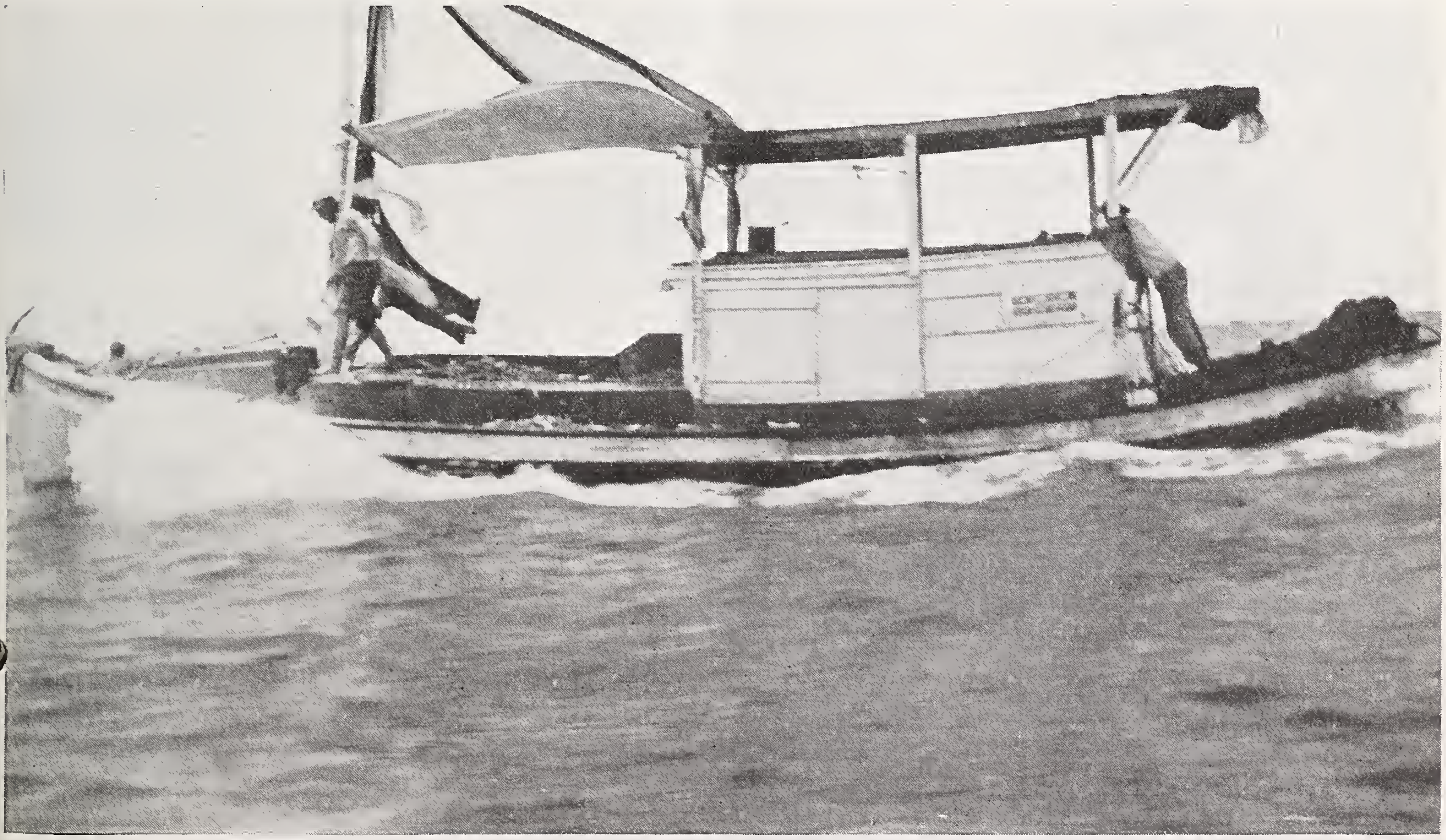
Consumers do not have X-ray eyes. They must depend on labels to tell them what is inside a can. Federal laws provide for two kinds of label regulation: The approval of a label before it is used, and the policing of labels already in use.

Only two kinds of labels must, by law, be approved before the products on which they are used are offered for sale: Labels on meats and meat products, and labels on distilled spirits. Under the provisions of the Meat Inspection Act all labels for use on meats and meat products must be approved by the Department of Agriculture before they may be used.

Consumers can require two things of labels. One is that the label tell *all* the facts a buyer should know; the other is that the label should not tell a falsehood. The Department of Agriculture makes the first type of requirement—with one exception—in its control of meat labels. It does not require the label to indicate the *quality* of the contents. It does demand, however, that the label describe the contents of its can or package honestly; a mixture of beef and pork must not be described as beef alone. A meat loaf containing beef, veal, and pork may not be called veal loaf. Or, if it contains more than 50 percent veal, it may be called veal loaf, beef and pork added.

Farm-processed products are prized highly by some consumers. Country

[Continued on page 19]



Voluntary canned shrimp inspection by the Federal Food and Drug Administration covers the product all the way from the boats to the final shipping of the product from the cannery.

Cooperation

Ohio cooperators made history on April 5. For the first time a State-wide conference was held for farm and city consumer cooperative leaders to thresh out their common problems.

Big and little cooperative problems were put under the microscope at this notable gathering where representatives present came from enterprises doing a business all the way from $1,800 to $600,000 a year.

Delegations ranging in size from 1 to 16 members came from every corner of the State, from Cleveland, Cincinnati, Columbus, Chillicothe, Akron, Dayton, Port Clinton, Dillonvale, Yellow Springs, Lakewood, Troy, Warren, Highland, Westerville, Seneca, Delaware, Marion, Hiram, and Medina.

Present, in addition to city cooperative groups, were at least a half dozen representatives of county farm bureau cooperative associations which are already dealing cooperatively in consumer goods and are thinking of entering the consumer cooperative field more intensively.

Addressing the conference was Murray Lincoln, Executive Secretary of the Ohio Farm Bureau Federation, who stressed the importance of activities which bring city and farm people together in a common purpose. "Consumers' cooperation", Mr. Lincoln declared, "offers a good opportunity for such action." He assured the group that the Ohio Farm Bureau will continue to render every possible assistance to city cooperatives and called attention to the fact that the Farm Bureau now offers such groups a source of supply for petroleum products.

Farm and city cooperators together threshed out such problems as these: What kind of delivery service a cooperative should have which serves a large area, how can newly organized cooperatives finance themselves, what should be the labor policies of cooperatives, what kind of contracts should cooperatives have with private firms, how to secure volunteer manpower to promote the cooperative movement, should the use of cooperative label products be promoted, should Ohio cooperatives form a State-wide league, should they establish a cooperative magazine, should they set up a wholesale organization to service retail outlets.

Final answers to all these questions obviously could not be given at a 1-day conference. Most pressing for decision were the last three questions which the conference voted to turn over for consideration to a committee of five to be appointed by the Columbus Consumers Cooperative, Inc., chief promoter of the conference.

How to organize a city cooperative has baffled many groups eager to try this method of making pennies go farther. Mr. E. R. Bowen, speaking at this Ohio farm-consumer conference, gave these rules:

I. ORGANIZATION PROGRAM

(*a*) A person interested in cooperatives gathers a small group which is interested in promoting cooperatives and forms a cooperative council.

(*b*) Study circles are then formed to study various aspects of the cooperative movement. (Whenever possible make these neighborhood groups.)

(*c*) After a thorough education in the various aspects of cooperatives the group should proceed to undertake some kind of cooperative business.

(Another speaker set up the following requirements before setting up a cooperative business: Start with the sale of some product or products where there is a substantial margin of profit, where there is a known friendly supply of goods, and where there is a relatively constant demand.)

II. EDUCATIONAL PROGRAM

(*a*) Have membership meetings at least quarterly. See that the programs for these meetings are thoroughly prepared and include a variety of activities, i. e., drama, picnics, and other social affairs.

(*b*) Have an active youth organization connected with your cooperative.

(*c*) Have an educational program for your employees organization.

(*d*) Study circles are the most effective form of cooperative educational activity.

(*e*) Sell cooperative literature just as you sell other cooperative products.

(*f*) Have a loan library of cooperative books, magazines, and pamphlets.

III. PUBLICITY PROGRAM

(*a*) Get the cooperative movement discussed from as many public platforms as you can.

(*b*) Write up interesting new articles on cooperatives for the local paper.

(*c*) Your cooperative should have its own publication.

(*d*) Do not neglect pictorial methods of publicity, such as posters and movies.

(*e*) Your cooperative should issue pamphlets describing the services and activities of the organization.

IV. PROMOTION ACTIVITIES

(*a*) Use displays to promote your cooperative.

(*b*) Have a mailing list for direct mail contacts.

(*c*) Advertise cooperative services and goods.

(*d*) Have cooperative affairs discussed over the radio.

MELONS COME TO MARKET

[Concluded from page 5]

Cantaloups which fail to rate "U. S. No. 1" are ungraded.

Use of Federal-State inspection service is optional with growers and shippers. During the fiscal year 1935–36, 2,476 carloads of cantaloups, 14 of Honeyballs, 1,023 of Honeydews, were inspected at the shipping point. Shippers pay a small fee for this inspection service, and in return receive certificates showing the grade of the melons. Most growers, though they do not use the Federal-State inspection service, nevertheless grade their melons for size and maturity. Five States, California, Colorado, Delaware, Maryland, and Arizona, have regulations concerning the maturity of melons which can be shipped.

Individual melons are not stamped with a grade mark, and the majority of them are not wrapped. Wrapping each melon is not considered advisable as the papers interfere with the cooling of the melon in the refrigerator car and may cause mold. In a few sections a small label is placed on each melon, or the melon is branded with a shipper's mark. But as marking requires additional handling, this is not always done.

WHAT KIND OF SAFEGUARDS?

[Continued from page 17]

sausage, for example, has a savory meaning to many persons. Because such terms as country and farm have a definite meaning to consumers, the Department of Agriculture insists that a product described on a label as "country" or "farm" shall actually be made in the country or on the farm. If the products are prepared in a factory in the same way as country-processed, then they may be described as country *style*. Philadelphia scrapple has moved some breakfasters to poetry, and scrapple so labeled must actually be Philadelphia-made; otherwise, as in the use of the words "farm" and "country", the label must say "Philadelphia-*style* scrapple." In this manner the use of place names, or names descriptive of a particular method of manufacture, are regulated for the protection of consumer and producer alike.

Control of meat labels even extends to graphic description of the contents of a package. A picture of a pig on a can of meat means that the product's major ingredient is pork. Under Federal regulations governing the use of labels for meat and meat products no picture may be used which might lead a consumer to expect something that he doesn't find on opening the can.

[Concluded in Next Issue]

Our Point of View

The CONSUMERS' GUIDE believes that consumption is the end and purpose of production

To that end the CONSUMERS' GUIDE emphasizes the consumer's right to full and correct information on prices, quality of commodities, and on costs and efficiency of distribution. It aims to aid consumers in making wise and economical purchases by reporting changes in prices and costs of food and farm commodities. It relates these changes to developments in the agricultural and general programs of national recovery. It reports on cooperative efforts which are being made by individuals and groups of consumers to obtain the greatest possible value for their expenditures.

The producer of raw materials—the farmer—is dependent upon the consuming power of the people. Likewise, the consumer depends upon the sustained producing power of agriculture. The common interests of consumers and of agriculture far outweigh diversity of interests.

While the CONSUMERS' GUIDE makes public official data of the Departments of Agriculture, Labor, and Commerce, the point of view expressed in its pages does not necessarily reflect official policy but is a presentation of governmental and nongovernmental measures looking toward the advancement of consumers' interests.

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Only a limited number of copies of the CONSUMERS' GUIDE may be printed, and the demand for them is taxing that limit. If your friends, consumer organizations, or schools would find it useful, don't discard your copy when you have finished reading it. Pass it along, and keep it moving. . . . Some Home Demonstration Agents, with whom we checked, reported that an average of 35 consumers saw each of their copies. Can you better that record?

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Volume IV, No. 5 May 3, 1937

FARMER AND CONSUMER INCOMES

SEE PAGE 3

CONSUMERS' Guide

Issued every two weeks by the Consumers' Counsel, Agricultural Adjustment Administration, Department of Agriculture, Washington, D. C.

Vol. IV, No. 5 May 3, 1937

In a country as complex as ours, doing millions of different jobs, turning out millions of different articles, and spending money in millions of ways, it is difficult to see at a glance how we are faring.

To consumers, and therefore to the country, one signpost is more important than any other. It is the one that tells us whether we have arrived at the road of *increasing purchasing power*. That is the only goal that means real prosperity for all of us.

Dollar bills in themselves cannot satisfy hunger or thirst, keep us warm or cool us off, carry us to distant places or bring things to us. Money is important only in terms of what it will buy. Along with more money must come more goods, better quality goods, and progressively decreasing prices, so that more consumers can buy the goods they need, so that all consumers can buy more goods, so that the demand for these goods will keep mills and factories and shops busy, so that busy industry and trade can keep on employing workers and paying them decent wages. If profits grow too fast, if wages do not grow fast enough, if jobs do not increase enough, if lower costs of production do not get passed along in lower prices, trouble is sure to come.

In the following six pages we show which way income, production, living costs, and purchasing power are moving. Most of these data refer to very large groups of people or things. Because they are broad in their scope they tend to obscure the danger signs that have already shown up in specific situations. For instance, there are groups of workers, within the general classification of "labor", whose income has not increased as much as the average for the group. There are goods whose prices have increased much more than the average shown in cost of living changes. There are industries whose production has increased much more and whose payrolls have increased much less than average. There are industries which are passing on to profits, instead of cutting prices, too large a part of the benefits gained from lower production costs. These exceptions are important, but there is not space here to present them. In future issues of the Consumers' Guide we shall come back to them.

Measuring distances which a nation moves forward or backward economically naturally requires a starting point. The starting point used in the following pages is the average for the 5 years, 1925, 1926, 1927, 1928, and 1929. This average is represented as 100. (Because of lack of data, the "base" for purchasing power of "labor" is the single year 1929.) Latest figures available for all items portrayed are for March 1937. To make fair comparisons with conditions in the depression, data for March 1933 are shown.

Farm income represents the money farmers made selling produce from their farms and any payments received from the Government. It does not include other kinds of cash income farmers receive. Nor does it include any estimate of the cash value of the products consumed by farm families from their own farms.

Nonfarm income represents the money that the rest of the country received, in wages and salaries, dividends, interest, rent, and other types of money income.

Labor income represents the best estimates that can now be made of the wages and salaries which all employed people (except farm labor) receive. It includes wages paid to workers on relief as well as to people employed in private industry, and money paid to themselves by people who are in business for themselves. Records are not good enough yet to weed out salaries paid to executives in business so as to get a picture of wages only. Nor do the figures include any income received by employed people outside of their employment.

Factory payrolls represent the wages paid only to employed factory workers as a group. Factory workers are only a small part of all the workers in the country. Obviously this factory figure tells nothing about the number of people who are supported by the earnings of factory workers.

Factory employment represents the number of workers hired by factories. It takes no account of the number of hours these people work, nor of the number of people dependent on employed workers.

Industrial production represents directly and indirectly nearly 80 percent of the total production of goods in the United States. It is a measure of the amount of these goods, not their value in dollars.

Cost of living represents the prices which workingmen's families must pay for their everyday necessities, according to the importance of these necessities in the family budget.

Real income.—Here the major facts of importance to consumers are lined up. Real income represents the goods and services which money income will buy. Three estimates are shown: The real income of the average person not getting his income from a farm (this includes people who live on unearned, as well as earned, money income); the real income of the average person earning wages and salaries; and the real income of employed factory workers as a group, not of the average per person. Employed factory workers in a depression period such as March 1933 were a relatively small group, and we have no way of figuring how many unemployed people they had to support with the wages they earned. Any estimate of real income per employed factory worker would not give a fair picture of conditions among workers generally.

Agriculture's picture reflects some of the gains made in income by nonfarm people. On the final page, we show changes in the prices farmers receive, and in the prices farmers pay for the goods they need, not only in their business but in their households. *Ratio of prices* represents what goods farmers can buy with the prices they receive.

Finally, we show the farmers' share in the prices consumers pay for 10 foods. Important measure of farmers' prosperity is not only a bigger income but a larger share in consumers' dollars.

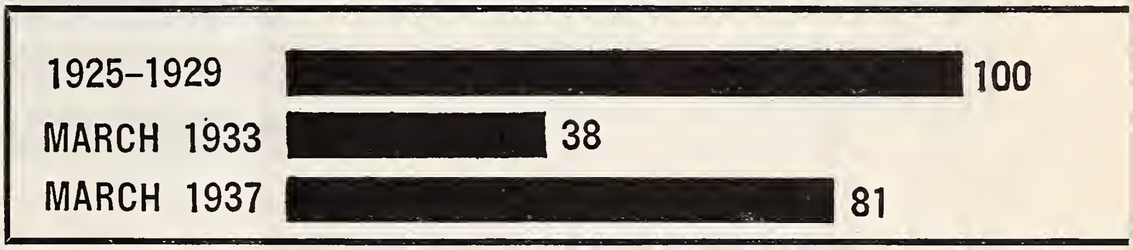
WHERE ARE WE NOW?

Signposts that point which way real income has moved since predepression years and the low point of depression

1. MONEY COMING IN

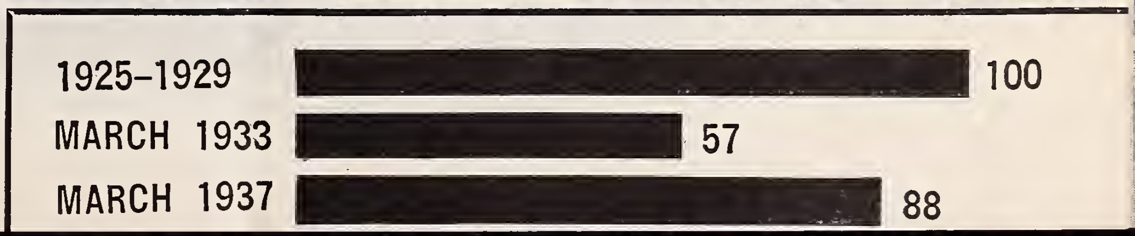
FARM

Farmers' cash income took a harder licking in the depression than did nonfarm income. It shrank to a little more than a third (38 percent) of its predepression size. Since March 1933 it has stepped up to 81 percent of its 1925–29 level. By March 1937 it was much closer but not quite back to the same relative position with nonfarm income which farm income had before depression set in. Despite the gains, it is still 19 percent below the level of farm income in 1925–29 and it has to meet the needs of more people. In predepression years the average population on farms was 30,500,000 people. The farm population now has reached 31,800,000.



NONFARM

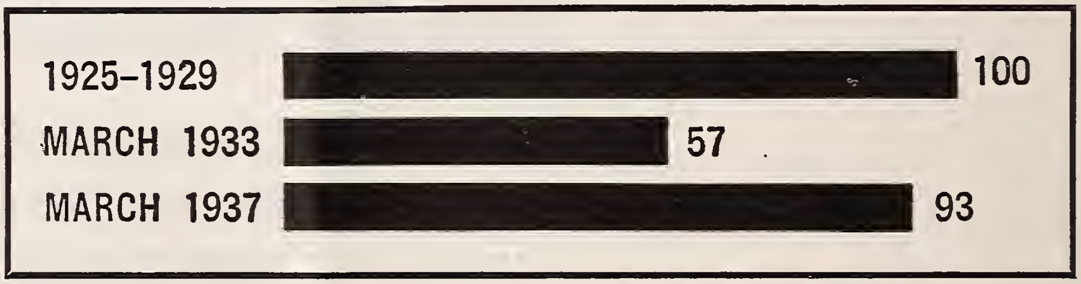
Income from nonfarm sources, too, showed a serious dip in the depression, but not so serious as did farm cash income. In March 1933 it was only 57 percent as large as in predepression years. Four years later, in March 1937, nonfarm income had swelled in size to 88 percent of the 1925–29 average, leaving 12 points still to go to match this better level as against 19 percent for farm income. The number of people dependent, in the main, on nonfarm income has increased even more than has the farm population—from 87,000,000 in 1925–29 to 96,000,000 now.



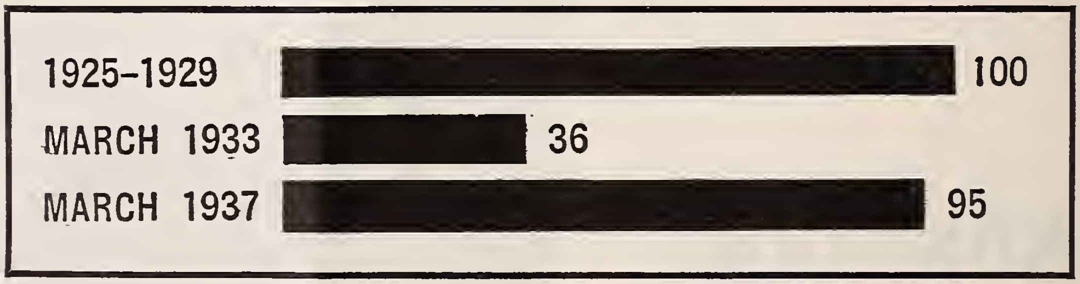
Labor income has followed much the same route taken by nonfarm income. At the bottom of the depression it was only 57 percent as large as it was in predepression years. More jobs and better pay plus Government expenditures in wages to relief workers have lifted labor income up from this low level to 93 percent of its 1925–29 level. Again, more people had to share in this income. Not counting the number of people dependent on these earnings, because there is no record of them, there are some 5 percent more earners sharing in this labor income now than in 1929.

Among the people earning wages certain groups fared just as badly in the depression as did farmers. Particularly was this true of factory workers whose income fell in March 1933 to 36 percent of the 1925–29 level. Employment dropped, too, to 61 percent. Like farmers, factory workers *with jobs* are now in an improved situation. They have increased their group earnings to 95 percent and their employment to 100 percent of the 1925–29 levels.

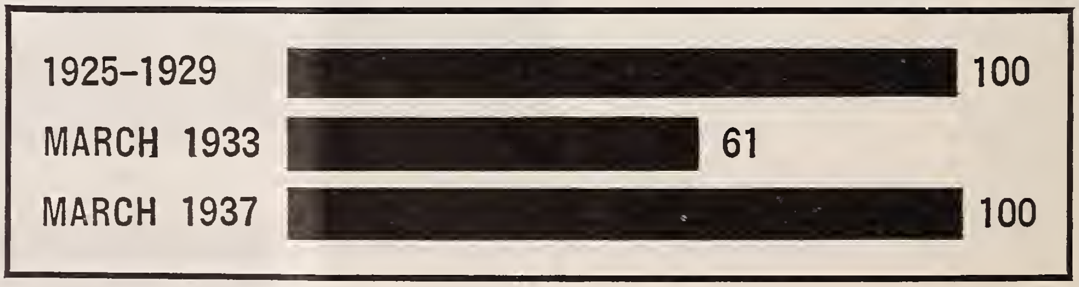
LABOR INCOME



FACTORY PAYROLLS



FACTORY EMPLOYMENT

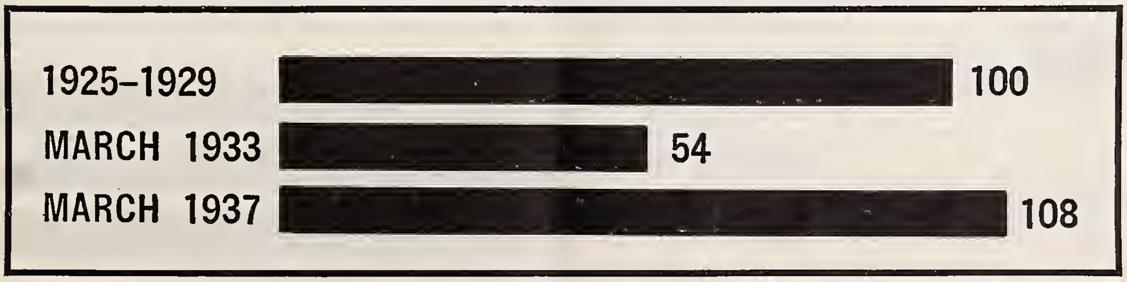


2. GOODS PRODUCED

Mines and factories are busy again. They are turning out more goods. In March 1933 industrial production had slowed down until it was just a little more than half (54 percent) as great as in 1925–29. Primed by public policies stimulating consumption, by more money in consumers' pocketbooks, by orders from merchants who are stocking up against possible price increases, by stirrings of war abroad, and by other causes, industrial production now is not only as great as in 1925–29 but 8 percent greater. This measure of industrial production includes both mining and manufacturing. Manufacturing production is 6 percent above the 1925–29 level.

Now glance back at the record of factory payrolls and employment, on the opposite side. The gain in manufacturing production has far outstripped gains in factory payrolls and employment. Better methods of production which develop year after year mean that many goods can be produced with fewer workers and smaller payrolls. If all the city workers who need jobs are to find them in industry, production must step up still further. If workers are to be enabled to buy back the increasing supply of goods industry produces, their pay checks must keep on increasing or the prices of goods must fall off. No nation can grow prosperous if too large a share of the gains of industry go to profits rather than to the workers who produce the goods, in the form of higher wages, or to consumers who buy industry's goods, in the form of lower prices. In 1 year, from 1935 to 1936, profits of the same 940 important industrial corporations increased 550 million dollars. An estimate of total industrial profits in these 2 years indicate that for every dollar added to payrolls 50 cents was added to profits. There are no comparable figures for predepression years and 1933.

INDUSTRIAL PRODUCTION

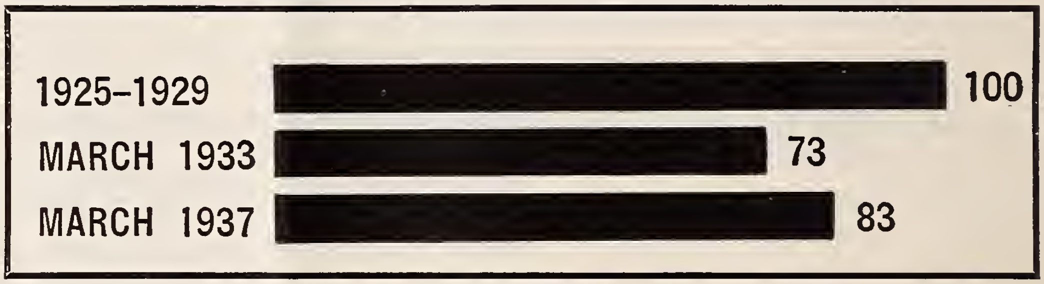


3. MONEY GOING OUT

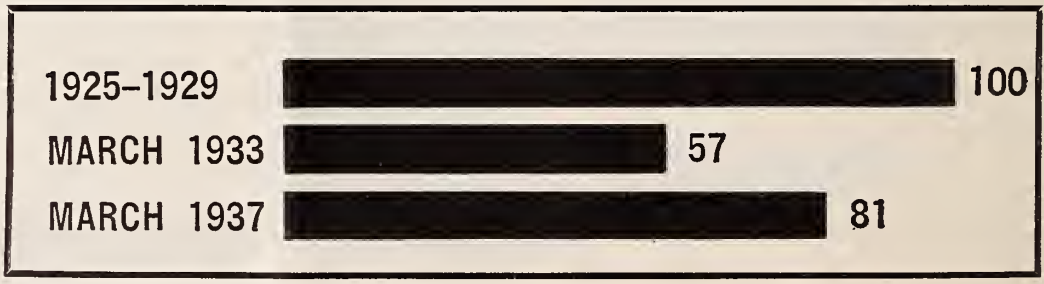
(NONFARM)

Costs of living represent the other side of the worker's ledger. Most of the money that goes into workers' pockets goes right out again to pay for the goods and services that keep people alive and well, or at least alive. Food prices during the depression took much the same nose dive that wages took, but other living costs dropped much less. Total living costs in March 1933 were only 27 percent below 1925–29, while nonfarm income and labor income were 43 percent and factory payrolls 64 percent lower. By March 1937, living costs had increased, as income had, but until this date they had not stepped up as fast. They are now about 17 percent below predepression costs, while nonfarm income is 12 percent below, labor income 7 percent lower, and factory payrolls 5 percent under 1925–29 levels.

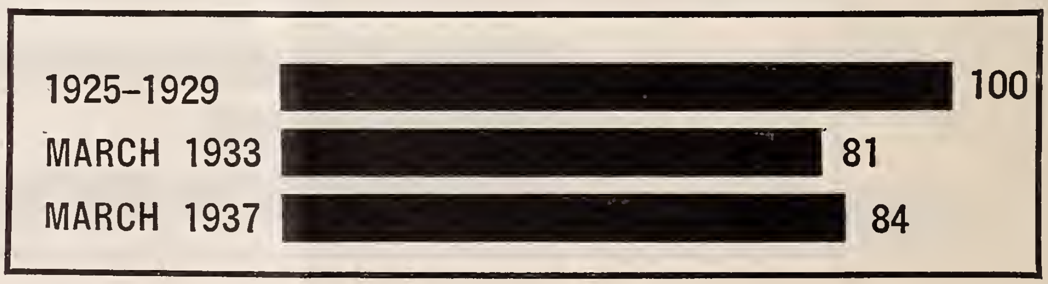
COST OF LIVING



FOOD



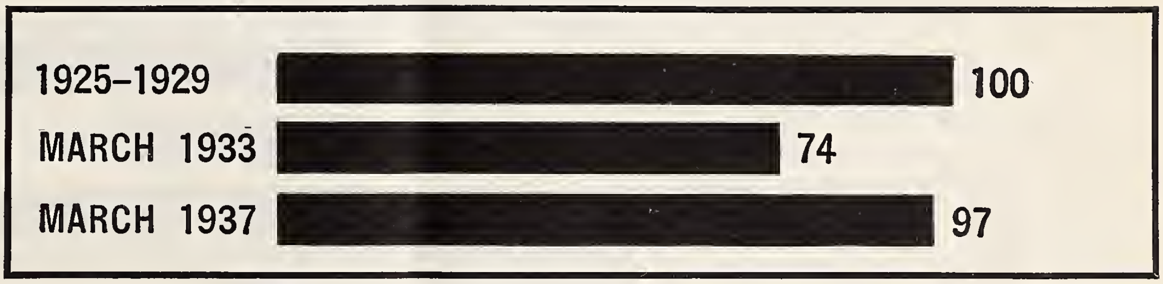
ALL OTHER ITEMS



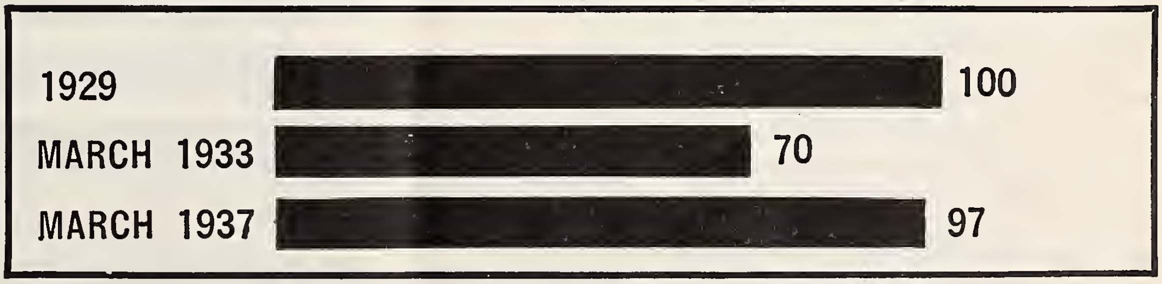
4. REAL INCOME

Consumers' true measure of prosperity is how much goods and services they can buy with the money they earn. Divide money income by the cost of necessities and you get "real income." We give three measures of real income on this page. In the first we show changes in the real income of the average person not living on a farm. The real income, or the purchasing power, of this average person in March 1933 was only 74 percent of his purchasing power in predepression years. By March 1937 it was back to 97 percent of this higher level. Next comes the real income of the average person getting wages or a salary. Here we have to make comparisons with 1929 because figures are not available for earlier years. This average worker in March 1933 had a real income only 70 percent as large as his 1929 purchasing power. By March 1937 his real income had increased to 97 percent of 1929. Finally, factory workers. Because employed factory workers as a group represent only a portion of all the actual and possible wage earners, we have not measured his average real income but show how the real income of the group has changed. As a group, workers who had jobs in factories both in the years 1925–29 and in March 1933 (of course, that number was severely cut) had a real income only half as large at the bottom of the depression as before. Many more workers are now employed in factories and wages have gone up, so that the real income of this whole group now stands 14 percent higher than in predepression years.

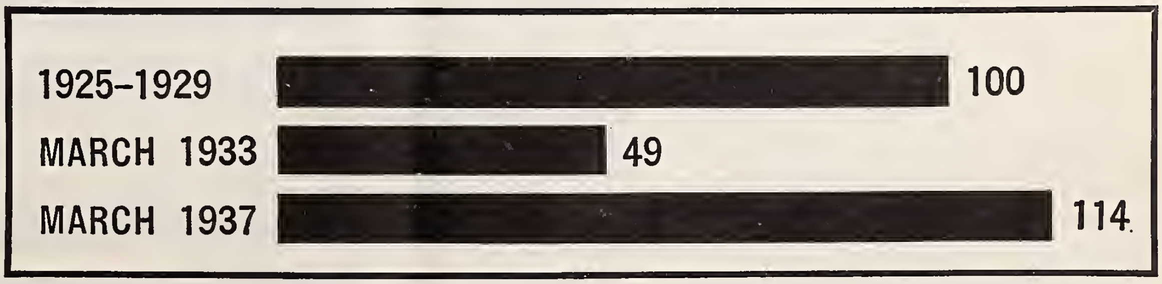
NONFARM



LABOR



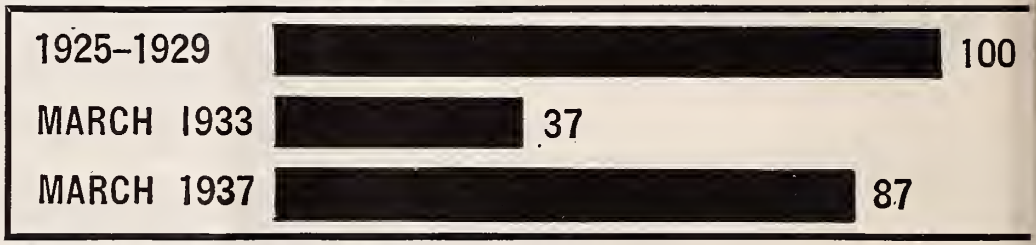
FACTORY PAYROLLS

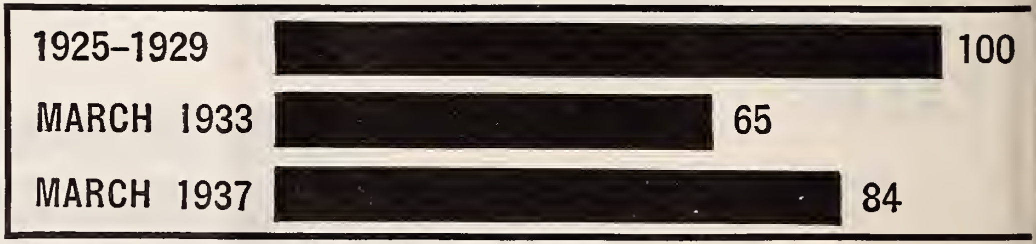


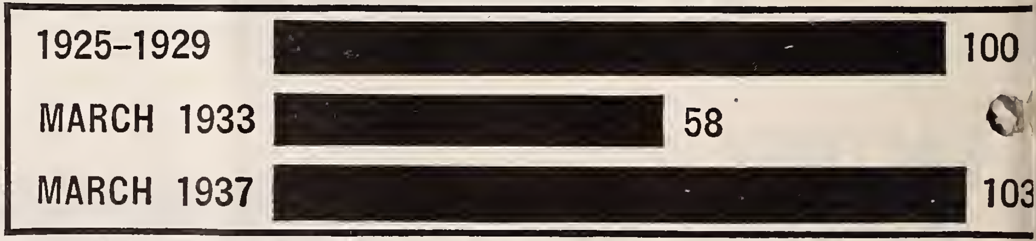
5. WHERE FARM PRICES STAND

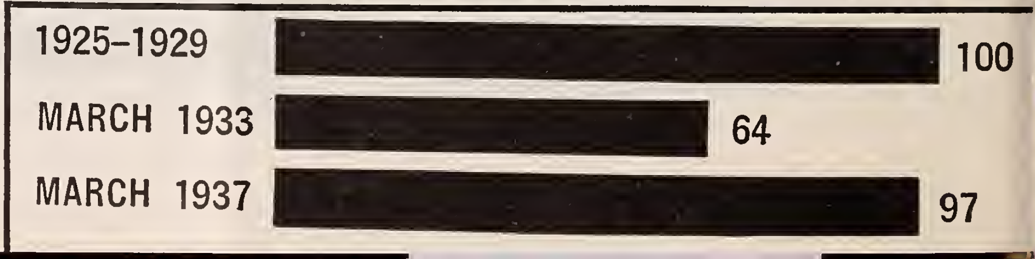
In most consumer budgets, food is the biggest single item. Its cost usually amounts to at least one-third of the family expenditures. Whether consumers get an adequate supply of food at fair prices depends in large measure on how farmers fare. Consumers stand their best chance of getting abundant supplies at fair prices when farmers are prosperous. One index of farmers' prosperity, or lack of it, is the way prices received by farmers move in relation to the way prices paid by farmers move. The third chart here shows the combination of these two price movements, or the purchasing power of farm prices. In March 1937 this purchasing power had dropped to 58 percent of its predepression level. Now it stands at 3 percent above the 1925–29 level. Another index of farmers' prosperity is the share they get of consumers' food dollars. In March 1937 this share was almost as large as it was before the depression.

Many of the photographs in this article were furnished by Resettlement Administration.


PRICES RECEIVED BY FARMERS


PRICES PAID BY FARMERS


RATIO OF PRICES PAID TO PRICES RECEIVED


FARMER'S SHARE IN CONSUMERS' DOLLAR

WHAT KIND OF SAFEGUARDS?

More facts about Government control of labels on food packages. This is the second of two articles on Government on the food front *

An official of the Food and Drug Administration measures the empty space between the top of the vegetable and the top of the can to see if it comes within the legal limits set by Federal law.

HONESTY in labeling may be required in two ways: Negatively, in that whatever statements made on labels shall be truthful; positively, in that *all* the facts a buyer should know shall be stated. As we pointed out in the first installment of this article, the Department of Agriculture, in its control of meat labels, requires that labels honestly describe the contents of the can or package and be informative. It does not require that any quality grades shall be stated on labels.

Meat products described as "country" or "farm" must actually be made in the country or on the farm. If prepared in a factory, they must be described as "country style" if prepared in the same way as country-processed meats. Philadelphia scrapple must actually be made in Philadelphia or called "Philadelphia *style*" scrapple. Pictures on labels must not lead consumers to expect something inside the can, bottle, or container which is not there.

"Fresh" on a United States inspected and passed label may be applied only to meats and meat products which have been neither preserved nor cured. "Ham" describes "pork hams." The use of words descriptive of meat products has been strictly defined by the Department of Agriculture and packers are required to use these words in the meaning of the Department. Consumers interested in these definitions may obtain them by writing to the Bureau of Animal Industry, Department of Agriculture, Washington, D. C.

Superlatives cannot be used indiscriminately. Words like "best" or "finest" may be used when qualified by the packer's name. A packer may not simply say "Best Bacon", he must say "John's Best Bacon." How John's Best Bacon compares with Jack's Best Bacon is for the consumer to decide.

Of course, each label must state plainly the weight of the contents of the package or can to which it is attached. Nor can the weight of non-edible preservatives be counted in determining the weight of the contents. For instance, the weight of the brine in which sausages are sometimes packed may not be regarded as part of the contents of the can in determining the weight of the contents. Weights also must be given in the largest possible unit. "Seventeen ounces" sounds like more than "one pound, one ounce." Labels, therefore, must read "one pound, one ounce", or "one pound, eight ounces", as the case may be, in order not to be misleading.

Brand names often confuse consumers, but not those carrying United States inspected and passed stamp. The right of the Department of Agriculture to forbid the use of misleading brands was upheld strongly by the United States Supreme Court decision in the case of Brougham versus the Blanton Manufacturing Co. The Blanton Manufacturing Co. had been engaged in the manufacture of a fat containing 30 percent cream which it sold under the brand name of Creamo. Later, however, it stopped using cream in the manufacture of the fat, though it persisted in the use of the brand name. The Department of Agriculture sought to prevent the use of "Creamo" as a brand because it was misleading to consumers, since cream was no longer being used in the manufacture of the product. The case was carried to the Supreme Court and there, in a decision handed down on April 18, 1919, the right of the Department of Agriculture to forbid the use of misleading brand names was completely upheld.

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* First section appeared in the April 19, 1937, issue.

All cans bearing United States inspected and passed labels are stamped with the number of the packing house where the product is made. Each United States inspected meat packing plant has a number. Thus, any packaged or canned meat product may be traced, if necessary, to the plant where it was processed.

Labels of imported products must, like domestic labels, conform to United States standards. Very often they are printed in foreign languages and use local, almost untranslatable words, but whatever the difficulties of translation, the same rigid standards of truth are enforced on them as on United States labels.

During 1936 the meat inspection service approved more than 21,000 labels for meats and meat products; 3,587 were disapproved. Reasons for rejection vary considerably, but a measure of the consumer protection afforded can be seen by listing some of the reasons: False statements regarding quantity, quality, origin of product, and in a number of cases, false statements regarding medicinal and curative properties of the products.

Required Government approval of labels on food products in advance of their sale stops here. Voluntary approval starts with the shrimp and poultry product packers. In order to secure Federal supervision of their plants these packers must agree to the regulation of their labels. Just as in the case of meats and meat products, the Federal inspection stamp on a shrimp or a poultry product certifies that the label describing it is *truthful.*

With these exceptions there is no other Government supervision of labels on food products before the products appear on consumer markets. There is policing of labels after they appear on the market. In policing most labels the Government requires merely that the label shall not tell a lie. We will come later to those exceptions in which the Government requires that labels tell certain facts.

The Food and Drugs Act, which was enacted into law in 1906, together with the seven amendments to it adopted since that date, provides that a product is misbranded if its package or label contains statements, designs, or devices which are false and misleading. Violations of the law carry penalties all the way from forfeiture of the goods to fine and imprisonment.

Compare this with the label regulations under the Meat Inspection Act. There, no label may be used at all until it has the prior approval of the Department of Agriculture. Under the Food and Drug Administration the statements on a label are regulated in advance only by the manufacturer's discretion. Of course, if he violates the law he is likely to be prosecuted, but to establish in court that he violated the law it must be proved that he told an untruth on the label. He does not violate the law if, for instance, he simply refrains from telling the truth. Under the Meat Inspection Act the Department of Agriculture may require that a label not only be truthful but that it also be informative.

No canner is required to grade the quality of his goods or mark its quality grade on the label but an increasing number are doing so and using the Government's standards of quality for their grading.

With certain exceptions, the Food and Drugs Act does not require that a label give any relevant information to the consumer.

When products contain certain drugs or alcohol, the processor is required to note their presence on the label, and the amount or proportion.

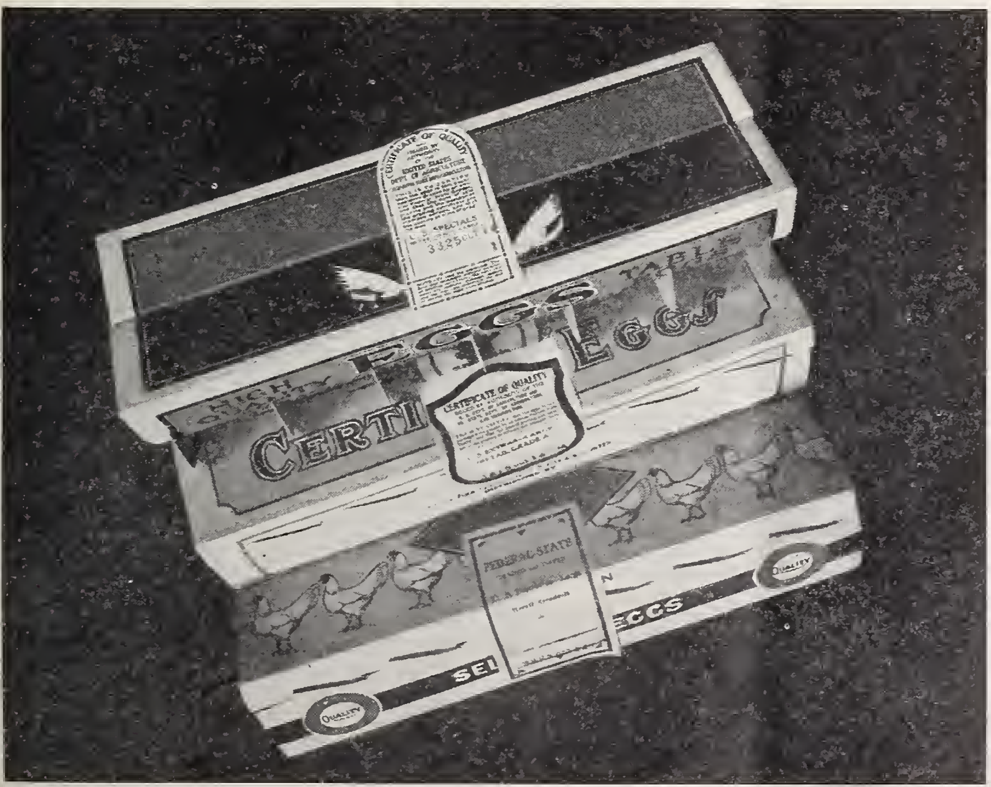
Simple, unmixed foods cannot be sold under fanciful or "trick" names. The same is true of drugs described in the United States Pharmacopœia or the National Formulary, which are authoritative compilations of recognized drugs and drug compounds.

Consumers should underline the fact that this applies only to simple unmixed foods and drugs. A drug or food that is a mixture may be sold under a brand or label which gives no indication of its contents.

Many foods have been defined for administrative purposes by the Food and Drug Administration, and butter is the only food which has been defined by law. These definitions serve as standards of identity, and only incidentally, imperfectly, and in a few instances, as to minimum standards of quality. Under the McNary-Mapes Amendment to the Food and Drugs Act, the Department of Agriculture has established minimum standards of quality for certain canned foods. Canned foods falling below this minimum standard must have this fact noted plainly on their labels.

Actual food content of a package is next in importance to the consumer. Here, too, the Food and Drugs Act requires that the manufacturer state plainly on the label the contents, in terms of net weight or other suitable units, of the food in the container.

Size of the container, however, sometimes influences consumers more than the actual weight of its contents. Consumers looking at shelves are impressed by the size of a can but learn later on opening the can that it is only partly filled. To prevent such deception the Department of Agriculture has issued, under the McNary-Mapes Amendment, regulations governing the fill of certain canned foods. These regulations prescribe the maximum amount of empty space in a can, and the maximum amount of liquid packing medium, such as brine or oil or water, that may be used. Such regulations now apply to all canned foods, as defined in the McNary-Mapes Amendment, either through general or special minimum fill of container standards.



Guessing on quality is not necessary for the consumer of these eggs because certificates or seals on the cartons show that the eggs have been inspected and graded by official graders and when the grading was done.

Labels and brands, of course, are not the whole concern of the Food and Drugs Act. The act also seeks to protect consumers by preventing adulteration, the addition of poisonous or harmful ingredients to foods and drugs, and the use of filthy, decomposed, or putrid ingredients. Bright colors in foods today present little hazard to consumers but manufacturers of food dyes voluntarily submit samples of color batches for testing by Food and Drug Administration chemists before they market their dyes. Safe dyes receive a certification of a consumer guarantee of purity that shows on the container.

Effectiveness of consumer protection under Federal Food and Drug Act is implemented by similar protective work of State and municipal agencies within their jurisdictional limits. Often where limited funds and personnel make adequate enforcement difficult the Federal agency is enabled to stamp out specific hazards by enlisting the cooperation of other agencies.

For a full discussion of the Food and Drugs Act refer to the following article in the CONSUMERS' GUIDE: "Policing Foods for Humans and Animals", February 22, 1937.

A-B-C grading or other consumer guides to quality are not required by Federal law for any food product. Consumers may, however, procure at their grocery stores, if they demand them, many food products that have been graded for quality according to

[Concluded on page 22]

A New Venture in RURAL EDUCATION

Young farmers of Wisconsin learn new ways of meeting their producer and consumer problems through their Farm Folk School

Sound farm practices, wise practitioners know, do not spring out of the ground like weeds. They need cultivation. Nor is good farming concerned only with the physical operation of a plot of ground inside a fence. It must reckon, too, with economic forces that sweep across all farm fences, into cities, across the seas, and swing back again to farm doorsteps.

Keeping abreast with improved farming methods, understanding the tugs and pulls of economic forces, learning how to build well-integrated lives—these problems lay heavy burdens on modern-day farmers. In meeting them, many agencies—farmers' own organizations, educational institutions, cooperatives, the Government—lend a hand. Now comes a new type of school to give young farmers a boost toward greater economic security and abundant living.

Modeled after the famous folk schools of Denmark, the Wisconsin Farm Folk School at the University of Wisconsin at Madison today looks forward to the time when it, like the Danish folk schools, will become a vital everyday force in the life of every Wisconsin farmer. Through it farmers are helped in learning not only how to make farms pay, but how to enrich their life on the farm.

Folk schools are not for children. They are for young men and young women, for adults. The average age in the Folk School is 20, but many students are older. Some are heads of families, some of them grandfathers. Students do not attend the schools as a part of the usual public school education, in which one grade follows another, one course another course, until in the end the student comes to his last grade, has his last course, and then graduates, through with school forever. The Folk School is designed for persons who work on farms or who own their own farms. It is intended to help people meet responsibilities to which they are already committed.

There are no examinations, no grades, no graduations in a folk school. Textbooks are used as rarely as is possible. Classes are for the most part informal discussions in which the instructor acts as a leader. In some schools students are asked to refrain from making notes. The emphasis is on the spoken word; the written word, they say, is cold and lifeless.

School is in the winter, so that farmers can attend during their slack period. Students live either at or close to the schools. Usually each group of students lives with an instructor, and, so far as possible, there is no separation of instructors from students. Schedules in the folk school plan provide for lectures which are scattered during the day, outdoor play, singing, assemblies, and for periods for reading and study. Other courses include farm accounting, history and literature, agricultural economics, agricultural methods, and natural science.

Organization of the Wisconsin folk school grew out of the limitations of an educational program for young people who intended to be farmers, known as the Agricultural Short Course. This course was designed simply to teach young men how to farm, nothing more. Such education is grim, and it was without surprise that educators in the University of Wisconsin noted that the Agricultural Short Course was dying on its feet.

Problems discussed and debated range over wide fields—economics, art, music, farm management, community organization—at the forum which students attend 3 evenings each week.

Shortcomings of its first effort at education for working farmers showed up the merits of the folk school idea. In 1932 the University of Wisconsin set about transforming its course into a folk school. The grimness of the former curriculum gave way to new methods of study. In addition to the vocational courses in farming, the school now teaches courses in music, in drama, in painting, in economics, in history, for it is the school's contention that cultural activities can thrive as well on the farm as in the city. Problems of farming, according to the director of the school, do not end at the fences that enclose the farm. Farmers must be trained not only to farm but to understand the world they live in.

Wisconsin's Farm Folk School students are mature. Their average age in 1936 was slightly under 22 years. Most of them came directly from farms in Wisconsin. There are also registrations from five other States. Educational requirements for admission are not rigid. Some of the students are college graduates, some of them even have graduate degrees. The majority of students, however, have only a high school education. Nearly one-sixth of the 356 students at the school in 1936 had never attended high school at all. All students, however, are mature enough to know what they want from the school and to work hard to get it.

One student enrolled because he inherited four farms from his father and knew nothing about farming. He intends to learn about farming and to run his farms himself. Another student discovered quite accidentally that he had a genius for working with horses, so he is at the school to learn what he can about horses before breeding them commercially. Each student comes to the school because he knows that the school will recognize him as an individual and enable him to meet the problems he has encountered. "We train toward the farm", the dean of the school has said. "It is time to establish the dignity of the farming profession and to develop rural citizenship." That this is being accomplished is plain from the fact that 95 percent of the students return to their farms after finishing school.

Wisconsin's course consists of two 15-week terms in successive years, from November to March. However, a student may enroll for only one term, or, if he wishes, he may return for a third or fourth year. Cost per student for a term at the Farm Folk School is $97.50. This includes $5 a week that is charged for room and board, tuition, and the cost of medical care. Those who are unable to afford this modest sum may obtain scholarship grants from the National Youth Administration.

Students sleep in dormitories that were rebuilt from soldiers' barracks which survived the World War. They bunk in double-decker beds in a huge room that contains 28 such beds. Each shares with another student a study room. Meals are served in a university cafeteria, and some students help pay the cost of their schooling by working here.

Education itself in the Folk School is as informal as is possible. It is conducted in laboratories, on the university farm, in the university dairies, and, whenever possible the teaching is incidental to a practical activity.

Attendance is now restricted to men, but plans are under way for

Farm boys get their chance to work out in laboratories their home farm production problems.

a folk school for farm girls, too. The dean of the Folk School recognizes the need for such a school. "It is", he says, "of the greatest importance to the young men who will man the farms of tomorrow that they have an opportunity to marry girls who will have developed an interest and sympathy for farm life."

Self-government is the rule at the Folk School. The students assemble periodically to pass the regulations by which they are to be governed, and here they learn the technique of running a successful meeting and prepare for the time when they will return to their communities and take an active part in civic and cooperative affairs.

Chief feature of school life is the forum held three evenings a week in the assembly hall of the dormitory. Outside lecturers lead discussions on topics of general interest. Sometimes an artist addresses the students on modern art, discusses with them the opportunities for artists to depict farm life. Other evenings there are concerts, followed by a discussion of music. Here, too, the students discuss problems of farm life, the technique of organizing and running cooperatives, and the problems of rural leadership. Students are encouraged, too, to talk over their problems with their instructors, to organize small discussion groups among themselves. One instructor lives in each dormitory.

Student activities are not confined only to the Farm Folk School. Often at the university attending the regular courses there are young men from the same communities as the students in the Folk School. Through them, Folk School students participate in the full university life and obtain the benefits of an experience that would ordinarily be denied them.

When school is over and students return to their farms, these new habits of thought, this new facility in artistic expression, this new understanding of individual and group economic problems find expression in the organization of economic, civic, and cultural group activities, and in the determination to bring to the farm the companionship and stimulation that the student found at school. School has helped the students to see beyond their own fences and the borders of their own community, and to shoulder the problems that are common to all of agriculture and to all the people.

Folk schools are no new phenomena in America. In 1876 a group of Danish ministers met in Chicago to foster the development of folk schools here. As the result of their activities many folk schools were established of which two still survive.

Brasstown, N. C., is the scene of the John C. Campbell Folk School which was established in 1925. Today around this school there has grown a small cooperative community with a credit union, a cooperative creamery, a cooperative corn mill, and a progressive farmers' association.

Students observe good dairying practice in the university's model dairy.

BUILDING a cooperative enterprise

A case history of one group of consumers who are trying the cooperative route to bigger and better larders

Many months of experimenting in cooperative buying preceded the opening of this grocery.

HOUSEHOLD buyers, not unreasonably, want for their families a wholesome, well-balanced diet at reasonable prices. Buying guides, consumers' organizations, food laws are some of the devices to help individual buyers get this kind of diet. Consumers' cooperatives, still relatively unimportant numerically, represent another kind of effort which consumers, as groups, are testing as a way to stretch food dollars and make them do full duty in getting the quantity and quality of foods which families with limited incomes need.

No easy solution to such consumer problems comes the cooperative route. Organization of a cooperative is itself a difficult job, but getting the machinery of cooperative business hitched up does not in itself guarantee higher quality food at lower cost. Before this can be achieved, cooperators, like private businessmen, must learn the minutiae of making a machine work, of gaging consumer demand, of knowing sources of supply, of buying wisely and selling efficiently, of keeping accurate accounts. To justify their existence cooperators must prove that they can do these things as well as, if not better than, private business, and withal keep the management of their affairs democratic.

In Washington, D. C., some blocks south of the wide-lawned Mall, which extends from the Capitol to the Lincoln Memorial, there is a cooperative grocery store. It does not pretend to have solved all of the problems which consumers' cooperation poses; it claims only to be an approach by one group of consumers to the solution of their food problem. The informal history of this store which follows recounts its activity, its successes, its failures, and suggests some of the problems that other consumers must meet if they attempt to start consumers' cooperatives of their own in this difficult field.

Convenient to the wholesale section, the wharves, and to Washington's open-air market, the Washington cooperative grocery store is admirably situated for the purchase of foods. But if it is in an excellent buying location it is far from the residential neighborhood where most of its cooperators live. That there is very little over-the-counter trade is evident in the store itself, which looks more like a wholesale grocery than one catering to consumers. Canned goods with their colorful labels fill the neatly made wooden shelves on one side of the store. On a stand against the opposite wall bushel baskets and burlap sacks are piled with vegetables. In the center of the store another wooden stand holds sacks of bulk foods such as sugar, beans, and gelatine, a white metal scoop in each sack. Cooperative brands predominate among the canned goods. Conspicuous, too, is the fact that canned goods are stocked in larger sizes than appear in the usual grocery store. Most foods seems to come in 50-ounce cans.

The manager of the store, a young college graduate, is at a desk deep in cooperative bookkeeping, with a typewriter and telephone at his elbow.

Rochdale Stores today has a weekly business of between $600 and $700. Two paid full-time workers, a paid part-time worker, and 10 short-time volunteer workers run the store. Prospects are good enough now so that the store contemplates employing a professional store manager, moving to larger quarters, and expanding its business to take care of the demand for a wholesale cooperative grocery distributor in Washington.

Today Rochdale Stores has a tradition and a history. Fifteen months ago it was merely a committee on buying in the Washington Consumers' Club. Six months before that the Washington Consumers' Club itself was only 10 people interested in cooperatives who met to talk about them.

Social organizations, like human beings, have their own personalities, and Rochdale Stores, Inc., is no exception. It acquired its personality by just growing. The original members of the buying committee, who eventually became the founders of Rochdale Stores, had no notion that their activities would eventually result in a cooperative grocery store. When they started to meet as a committee they did not even know what they were going to do, but from week to week, as a result of an original decision to buy cooperatively, the committee's activities have expanded and taken shape until now they are able to plan and to proceed in a predetermined direction by methods that they have tried and found workable.

In their earliest stages of cooperative buying, the chairman and a member of the Consumers' Club buying committee went to wholesale markets every Friday to buy the foods ordered by cooperating families.

First venture of the buying committee was a flyer in coal. Like many speculations, it did not turn out too well. The committee arranged with an independent coal distributor for the purchase of coal by the members of the Consumers' Club. It purchased coal for resale at $3 less than the retail price and sold the coal to its members at $2 less than the retail price. Part of the extra dollar saved was returned to club members at the end of 6 months in the form of consumer dividends. The rest went into the Club treasury. But before the end of the winter the bargain in coal proved to be slate. Consumers found that the coal was poor quality. As a result of many complaints, this arrangement had to be discontinued, and a new contract had to be obtained with another coal dealer, this time a reliable one. This second contract provided for the delivery of coal at the market price with a $1 rebate per ton to the Consumers' Club for every ton sold to its members. In this experiment $1,000 worth of coal was sold. Cooperative buying of coal is now in the hands of a special committee which not only handles these local purchases but also buys directly from a coal mine in Pennsylvania. This coal is sold to members at current retail prices. Last year it sold $4,000 worth and turned into the club treasury savings of over 20 percent.

Laundry service, too, the committee thought, could be secured for members through group buying. Here the research committee of the

Consumers' Club was brought into action. Each laundry from whom the buying committee obtained a bid was investigated by the research committee, particularly to determine labor conditions in the laundry. The research committee, however, placed an insuperable obstacle in the path of the buying committee, for no laundry which would agree to give a rebate had labor conditions which a consumers' club could approve. To secure consumer dividends at the expense of sweated labor was contrary to the established principles of the Club. As a consequence no satisfactory contract with a laundry could be obtained.

Intelligent buying of food requires training, as many consumers discover to their chagrin, and as some cooperatives have learned to their regret.

Fortunately the buying committee, made up of four women, included a member with extensive experience in quantity buying. Her original interest in quantity buying was provoked by an intense dislike for shopping. Buying food for her family seemed to take all of her spare time. She decided that if housekeeping were going to be bearable at all she would have to work out some way to get her food shopping done and over with as quickly as possible. This she accomplished by doing all of her food buying once a week. Soon she discovered that she was not only saving time but that she was also saving money. By making all of her purchases for the week at one time she was able to profit by good buys and to make savings by bulk buying. Further study revealed to her the advantage of buying by quality grade. In the end she was not only saving money and time, she was also able to serve her family food that was consistently good in quality, something she had not been able to do when she bought daily in small amounts. Buying by this time no longer bored her. As a result of her interest in buying she was soon made purchasing agent, without pay, for a nursery.

With this experienced buyer for chairman, the cooperative club's committee began to buy food for its members. First step in securing the full benefits of group buying was an agreement made by each committee member to put her buying on a weekly basis. Each Thursday evening committee members telephoned their weekly shopping list to the chairman, who, accompanied by a different member of the committee each week, set out on Friday morning to the markets to do the joint marketing for the group.

Wholesale prices, they learned, could be obtained from a particular wholesaler even with a $10 order for food. The same kind of coffee sold in retail packages under a brand name at 26 cents a pound could be bought for 19 cents a pound in hotel packages. By buying olive oil in half-gallon or gallon cans they were able to get 4 or 5 times as much as they would have received for the same amount of money spent for oil in 2-ounce or half-pint sizes. Macaroni which cost 80 cents a pound in 2-ounce packages they bought for 40 cents a pound in bulk. Gelatine cost 40 cents a pound; in small quantities they had paid $2.40 a pound for it. Vanilla cost half as much in bulk. Soap flakes, meeting Government specifications, cost approximately one-third as much. So it was throughout their list of household needs.

All purchases, where possible, were made by quality grades. Where the committee was doubtful of the quality of a particular commodity, or where there was no grade available, they sent samples of staple household supplies off to a consumer laboratory for testing.

Chief among their problems at this time was gathering together orders large enough to obtain wholesale prices. To insure big orders, each committee member solicited her nearby neighbors to get them to join in on the plan. So successful were they that buying units centering

In the suburbs the cooperative's hired truck delivered supplies for a group of families to the automobile of a member who then served as deliveryman the rest of the way to cooperating families.

around each of the original committee members came into existence. In time these buying units met every Thursday afternoon and made up their group orders. These were pooled with group orders from other neighborhoods. The chairman of the central buying committee had the master list ready for Friday morning's foray at the markets.

Orders were sizeable now. In fact, filling them was too heavy a job for two expert shoppers, so the whole committee took to Friday shopping. All of them were now trained buyers and specialists in different lines. One woman purchased poultry, eggs, and butter; another purchased staple foods; still another purchased meats. After these purchases had been made, the committee members came together again at one of Washington's open-air markets to purchase vegetables. All purchases, with the exception of the vegetables, were delivered by the wholesalers to the homes of each of the unit chairmen. Vegetable purchases went to the homes of the unit chairmen in their own cars. A small distributing center was thus created in the home of each unit chairman.

What to charge cooperating families for the food purchased at wholesale was a major problem at first. The cooperative principle is to sell all goods at the current prices charged by other retailers. Savings, under the cooperative plan, usually go back to the customers in proportion to the value of the purchases they have made. In the early days of this Washington experiment this principle was not followed. Cooperating families paid their share of the total wholesale cost. The buying committee made no charge for its services and added nothing to the price they paid to wholesalers. As an approach to the Rochdale method of doing cooperative business, certain buying units agreed to pay the wholesale prices plus 5 percent. This 5 percent mark-up was turned over to the Consumers' Club.

Not all buying units, however, pursued this plan. Others, following more closely the Rochdale cooperative plan, charged themselves the same prices which chain stores charged at retail, sent the required 5 percent to the Consumers' Club, and held the remaining money in a unit treasury. With this little treasury, added to each week, such units were enabled to buy in anticipation of needs, profit by market conditions, and accumulate stocks of goods which were held in the basements of the homes of their chairmen. One unit accumulated more than $200 worth of groceries this way. Where stores were accumulated, certain afternoons were set aside when unit members could go basement shopping.

Cooperative purchase of milk was got under way, too. The committee first obtained the sanitary ratings of all local milk distributors for the previous 6 months from the District Board of Health. Selecting the top four companies, it then checked these companies' labor record. This check reduced the number of milk suppliers with which the committee wished to deal to two. One of these, as it happened the smallest company, made a satisfactory contract with the Club. Under this contract, the milk company agrees to sell at current prices to Club members and to return to the Club 5 percent of its sales as a patronage refund. At the present time, about 100 families are buying milk from this supplier.

But to go back to groceries: Six months of experimentation in cooperative buying saw the original four members of the buying committee increased to seven units with four or five members in each unit. The units, in turn, had become growing concerns. Some developed their own treasuries, their own stores, their own club programs. New

Dining rooms, parlors, and basements of the homes of group chairmen became distributing centers for cooperative-purchased groceries where group purchases were divided into family baskets and families called for their own supplies.

wrinkles were tried. A project for buying canned goods in the summer at summer bargain prices for delivery in the fall almost came to grief, for the contract was given to an unreliable person and when fall came no delivery was made. By last-minute maneuvering, however, an order was finally placed with another wholesaler and the enterprise was saved, to the great relief of the committee and to the satisfaction of the other cooperators.

Building a business, such as this, was costly in time to the leaders. The work of the committee had grown to such an extent that one member was giving practically a whole week to its activities. Other members were giving from one to two days a week. Volume of business had grown from an original $50 to $250 a week. Membership had also changed. Some of the original committee members had found jobs and had dropped out. Others had left town. But the units were a constant source of new blood and as fast as one person dropped out, other persons joined up. Not all new members stuck. Some lost interest after a week or two, but in most cases women either dropped out immediately or became permanently enthusiastic members.

So far, the cooperative buying program of Washington's Consumers' Club was strictly a woman's activity. No men took part in the committee work. At the meetings of the Consumers' Club men members began to be critical. First of all they complained that they were excluded from the work of the committee. Then, too, they added, no cooperative ideal was being achieved by the committee's work. One man called it a "Haggler's Club." The women, defending their work, described the savings they made, pointed to the guarantees of quality they secured for their members. Most of all, they talked about the consumer education they had given to members. The men, finally, were won over. Out of the Club's deliberations an agreement was reached to work together toward the establishment of a cooperative store.

Consistent cooperators, the buying committee had all along attempted to buy from cooperatives wherever possible. One of their chief sources of graded eggs and scored butter was a producers' cooperative. When the time came to place the consumer business on a firmer and more permanent basis, this producers' cooperative came to their support by placing warehouse space for a nominal rent at the committee's disposal.

Equipped with a warehouse, the committee's purchasing of foods went on much the same as usual but from this time on all food was sold at current retail prices. The buying committee still made its weekly trip to the various wholesalers but the distribution of goods was more efficiently organized. All purchases made by the committee were delivered to the warehouse where volunteers packaged them and made up orders for delivery to the homes of the unit chairmen. Here, as before, the units made their own arrangements for final delivery to individual families. Delivery was made from the warehouse to the units by hired trucks for which the committee paid $1.10 an hour.

Still business grew. Sales soon totaled about $500 a week. To handle this business with the same care and detailed attention as before, the committee soon decided, would be impossible without the establishment of a cooperative store and the employment of full-time workers. In December 1936, the decision was made to open a cooperative store.

First essential step in the organization of a cooperative is the writing of articles of incorporation, and the determination of the financial structure. Lawyer members of the Consumers' Club served on the committee to prepare the articles of incorporation, while another committee looked for a store and made arrangements for moving. In the latter part of December the articles of incorporation were completed, the store was rented, and Rochdale Stores, Inc., was launched.

Rochdale Stores, Inc., is now an entirely separate organization from its original parent organization, the Washington Consumers' Club. It has a capital of $1,500 which was derived from the sale of shares to cooperators at $5 per share. Many members own more than one share but only one vote goes to each person. There is a board of directors consisting of eleven members which meets once a week. Shareholders meet once a year.

Management of the cooperative is in the hands of committees. Three directors' committees are: A store committee, which supervises the physical details of the store, moving, etc.; a legal committee made up of lawyer members of the cooperative; and a management committee. Shareholders' committees are: A store service committee, which provides volunteers to assist in the work of running the store; a price committee, which determines prices to be charged at the cooperative store by studying prevailing retail prices; and a research committee, whose chief task is to investigate labor conditions in the companies from which the cooperative purchases its supplies.

Supplies of food which various units had collected on their own account were distributed among their unit members prior to the establishment of the warehouse. Funds in unit treasuries were distributed to members as consumer dividends. Now all major activities are centered in the store. Unit committees still function as secondary distributing centers. The store still

[Continued on page 22]

Your Food Supplies

MAY is strawberry month. Heaviest berry supplies of the season are expected the latter part of this month. Production in the States shipping in May is estimated at 15 percent above a year ago. Strawberry prices probably will register further declines as shipments increase seasonally. Relatively high prices up to mid-April were due to delayed movement of the crop.

When money is short, strawberries may be an indulgence, yet consumers who wish to indulge and justify themselves may buy them, secure in the thought that strawberries rank as an "excellent" source of Vitamin C, often an expensive vitamin on the budget but one that wise consumers dare not omit from the diet. A serving of strawberries weighing 4 ounces gives only a little less Vitamin C than half a cup of orange juice.

Upward trend in retail food costs continued from March 16 to April 13, but at a sharply reduced rate, with costs going up only 0.3 percent. Marked price advances in all meats were primarily responsible for this rise. Moderate price increases in eggs and bread also tended to push up costs, but lower prices for dairy products and fresh vegetables kept down the rate of general increase. Changes throughout the United States were fairly uniform except in the Pacific coast and West North Central States. A relatively large drop in vegetable prices in these areas, offsetting advances earlier this year, caused costs in general to go down almost one-half of 1 percent.

Index of retail food costs on April 13, as reported by the Bureau of Labor Statistics, was 85.6 percent of the 1923–25 average. This was the highest level reached since February 1931. The increase of 7.4 percent over a year ago was due mainly to a 20 percent and 13 percent jump, respectively, in the cost of fruits and vegetables, and eggs. Other items averaged only 3 to 5 percent higher. On April 15, 1933, the index was 60.1, compared with 100.8 on April 15, 1929.

Slight downward movement in consumers' food costs may start within the next month or two, barring a repetition of last year's unfavorable weather. Prices, however, probably will continue higher than a year ago. Major factor determining when costs start moving down, as well as the rate of decline, most likely will be the meat price situation. It appears that prices of all other foods except eggs, apples, and citrus fruits will go down.

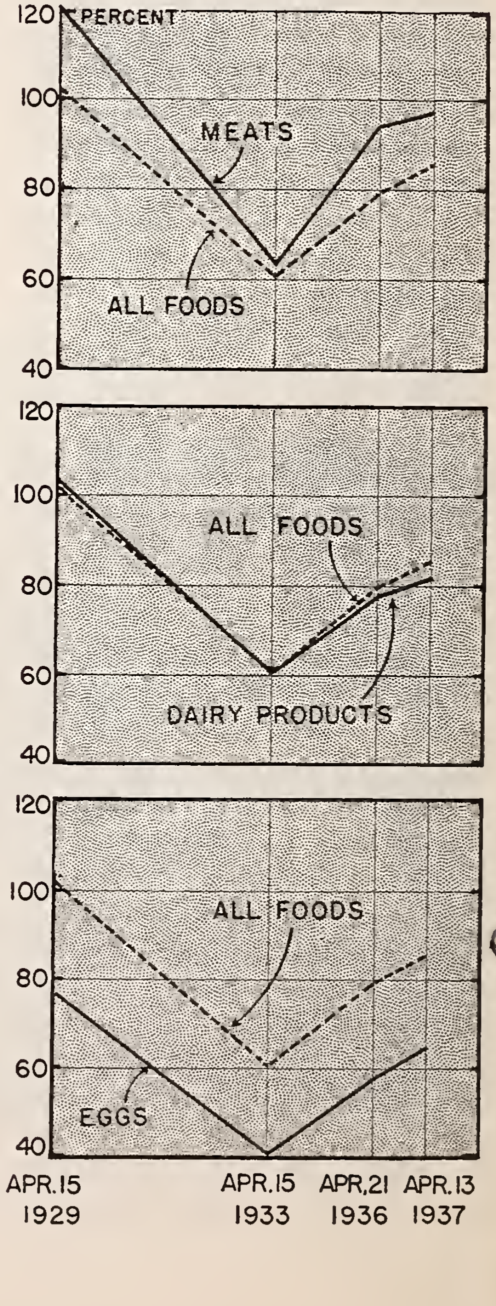
Vegetable prices usually decline in spring and summer months as supplies increase and are grown closer to consuming markets. Prices of potatoes, a relatively important item in the consumer's market basket, turn downward from May through mid-August and tend to push down costs in general. Seasonal decline in prices of dairy products occurs in the spring as cows go on pasture. Poultry prices also move downward after May, but egg prices usually advance from their April low point.

Meat price outlook is a little uncertain, mainly due to the cattle situation. Cattle prices have advanced steadily to relatively high levels. Ordinarily, prices of lower-grade cattle move down in the late spring and summer when supplies of grass-fed cattle increase. It is probable that the price decline this year will be smaller than usual if the expected heavy demand for current consumption and stock replacement purposes materializes. There is also some uncertainty as to whether prices of better beef cattle will drop in the late spring and summer as they did after the 1934 drought. Supplies of the better grades appear to be relatively small. However, lamb prices are expected to decline in late June, when delayed marketings from the spring lamb crop reach slaughter houses. No material change in pork prices is expected until July and August, at which time there is a seasonal rise.

Meat supplies during May are expected to continue relatively large.

Scarcity of feed, high feed prices, and late development of pastures have resulted in relatively heavy current slaughter of cattle. Some decline in hog slaughter may occur within the next month, but unusu-

A PERSPECTIVE OF FOOD COST CHANGES
1923~1925=100

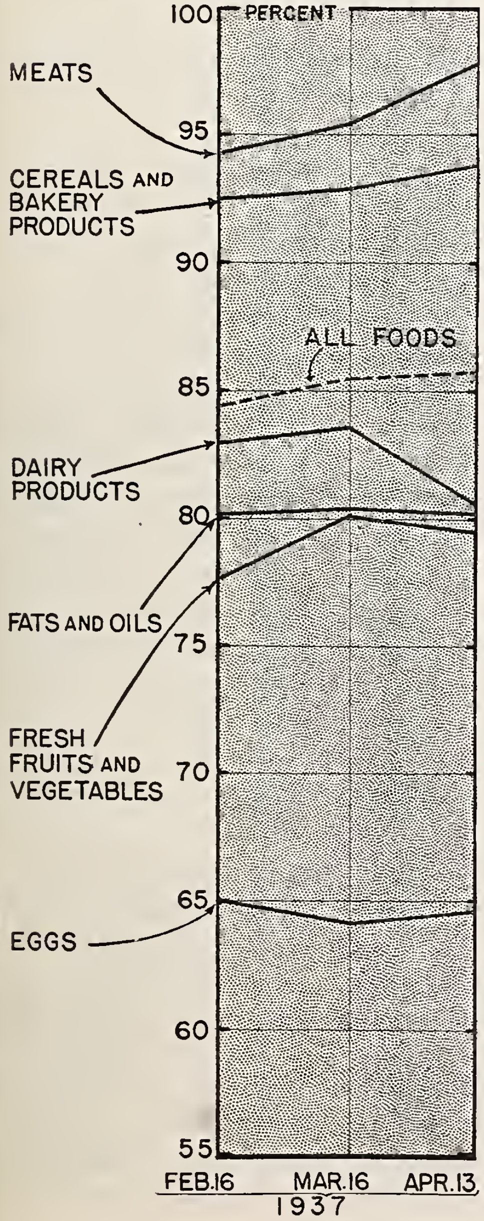


and Costs

ally large pork storage holdings will tend to offset this decrease. Large supplies of grass-fat yearlings are expected to balance the light supplies of grain-fed and spring lambs.

Retail lamb prices registered the sharpest increase in the meat group from March 16 to April 13. Lamb prices are from 1 to 4 cents a pound higher than at this time last year, due to late movement of spring lambs and an increased consumer demand for meats. No material downward movement in lamb prices is expected until late in June.

A CLOSE UP OF FOOD COST CHANGES
1923~1925 = 100



All beef items moved up in price at retail stores during the 4-week period. With the exception of several slight recessions, retail beef prices have been going up since the end of June 1936. It is probable that some decline in prices may occur within the next month.

Retail pork price increases from March 16 to April 13 were confined primarily to fresh items. Compared with last year, ham and bacon prices are about a cent per pound lower, and fresh pork is less than 1 cent a pound higher. Prices in May and June are not expected to go up and may even register some declines.

Increasing supplies and seasonal price declines are expected for most vegetables during May. Tomatoes are the major exception because of serious rain damage to the Florida crop. Lower tomato prices are in prospect for June, when supplies from Mississippi and Texas will be available. New onions are now moving to market in volume. Liberal lettuce supplies are in prospect for May. Potato prices are expected to move downward until about mid-August. Some temporary price rise may occur this month if old potato shipments decline at a much faster rate than the increase in new potato supplies. Larger green corn supplies are expected in May. However, the peak in supplies and low point in prices occur in July and August, when corn comes from local market gardens.

Apple and citrus fruit prices most likely will continue going up during May and June. Apple prices have been advancing since last September. Quality of cold storage holdings will determine the rate of increase until the new crop is available this summer. Orange prices probably will register more than usual advances this spring and summer because of curtailed supplies from California. The grapefruit season is drawing to a close, and prices are expected to move up seasonally.

Poultry prices probably will continue advancing in May, at which time the high point ordinarily is reached. Relatively heavy consumer demand for poultry appears to have offset the price depressing effect of large storage holdings.

Butter prices are expected to decline with the low point due in June. Production of butter during the first quarter of 1937 has been unusually small because of relatively high feed costs. This tended to cause an advance in retail butter prices instead of the customary decline. Pastures have been late in developing this year, but as soon as cows go on pasture a marked increase in milk and butter production is in prospect.

Egg prices ordinarily go up from April through November. Increases during spring months are smaller than rises during the late summer and fall. This April wholesale prices declined slightly without any material change in retail prices. Some market observers claim that the failure to reduce retail egg prices sufficiently this spring curtailed consumption and caused this wholesale price recession. Egg production is running about the same as a year ago, and it appears that prices will continue advancing in May.

Average retail white bread prices advanced another 0.1 cent per pound from March 16 to April 13, marking the second successive monthly increase. At 8.4 cents per pound, white bread was at its highest level since February 1936 and 0.2 cent a pound more than a year ago. Advances which occurred were minor with the exception of Dallas, Tex., and Portland, Maine. In these cities prices moved up 1 cent and 0.6 cent, respectively.

WHAT KIND OF SAFEGUARDS?

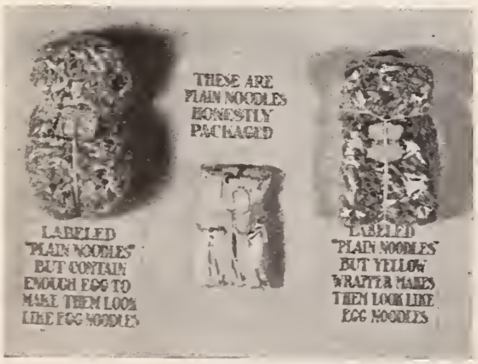
[Concluded from page 11]

standards set by the United States Department of Agriculture.

Under the authority of the Farm Product Inspection Act the Department of Agriculture's Bureau of Agricultural Economics maintains a grading service for the use of producers, packers, and distributors of certain food products. These standards were intended originally to help producers, industry, and trade come to a common understanding of the quality of the commodity they were trading in, and to enable farmers to borrow money on crops stored in licensed warehouses.

Today consumers as well as farmers recognize the importance of official standards and grades. Consumers can now purchase in many markets individual pieces or packages of meats and meat products, dairy products, canned fruits and vegetables, and poultry, each of which bears the mark of a Government standard of quality.

For a complete description of standards and of grading, consumers may read: "Present Guides for Household Buying", United States Department of Agriculture Miscellaneous Publication 193; "Toward Better Consumer Standards", CONSUMERS' GUIDE, December 14, 1936; "Standard Facts", CONSUMERS' GUIDE, July 27, 1936; and "U. S. Graded Beef", CONSUMERS' GUIDE, March 11, 1935. In addition there are many other articles and pamphlets on standards and grading. For a list of these, consumers are referred to the "Consumers' Bookshelf", CONSUMERS' GUIDE, March 8, 1937.


THESE ARE PLAIN NOODLES HONESTLY PACKAGED
LABELED "PLAIN NOODLES" BUT CONTAIN ENOUGH EGG TO MAKE THEM LOOK LIKE EGG NOODLES
LABELED "PLAIN NOODLES" BUT YELLOW WRAPPER MAKES THEM LOOK LIKE EGG NOODLES

Under the Food and Drugs Act, labels on food do not have to tell all the truth but whatever they do tell must be true and wrappings must not be misleading.

Adulterations of food are spotted by the Food and Drug Administration only after the food moves in interstate commerce. An official here is examining frozen eggs.

Grading according to Government standards of quality may be done in two ways before the goods are sent to market: First, by a Government inspector; second, by the processor. In the latter case, where the grade is marked on the product, it is assumed that the processor has labeled his product honestly.

After the goods have been put on sale, if a processor has been found to have labeled his product falsely as Grade A, or Grade B, or Grade C, he, of course, exposes his product to possible seizure under the Food and Drugs Act provisions relative to misbranding.

All meats, poultry, and eggs which bear Government quality grades are graded before sale by Government graders who mark the products. Other processors, such as canners of fruits and vegetables and manufacturers of butter, may, on the other hand, grade their products themselves, using Government standard methods, or request a United States grading specialist to sample a consignment of their products. By scientifically determined methods an accurate sample is selected, which is graded. Upon the basis of this sample, a certification of grade is then issued to the processor for trading or financial purposes, but the certification does not appear on the label which consumers see. In every case all expenses of quality grading are borne by the processor requesting the service.

From this survey of the Federal food inspection service, it is plain that the effectiveness of Federal consumer safeguards varies considerably. Most interesting fact is that voluntary action in some cases has resulted in the most effective types of supervision.

Consumers need not necessarily wait on new laws to secure desirable adequate inspection services. Under present laws for many foods the extension of the continuous inspection of production for both quality and wholesomeness can be achieved immediately by actions similar to those taken by the shrimp industry and the poultry products industry. Consumers can give impetus to the movement in this direction by demanding the Federal inspection legend on all the food they buy and by requesting their grocers to pass their requests along to the wholesalers.

●

BUILDING A COOPERATIVE ENTERPRISE

[Continued from page 19]

makes its deliveries to the units and the units take care of deliveries to the individual members. By the payment of a small service charge, however, a member may have delivery made direct to her home. The rental of a truck has been continued. This costs the cooperative about $22 a week, approximately 3 percent of its sales, and although some members are pressing for a truck owned by the cooperative, more conservative members point out that renting a truck with driver is cheaper than buying a truck and employing a driver. Today, orders are phoned into the store on Wednesday or Thursday and deliveries are made on Friday and Saturday.

Until the opening of the store new business was not encouraged since it entailed too much additional work for volunteer members. Today, however, the cooperative solicits new trade. A move to new quarters in a neighborhood where more cooperators live is now contemplated.

That, in short, was how one grocery cooperative got going. Although the group it now serves is not in a small neighborhood, the cooperative store still has the character of a neighborhood institution, in that all members are practically from the same income level, all are similarly employed professional persons, and to a great degree all have the same interests.

This small group of consumers has taken over for itself the retail distribution of its food. This has not been done with any world-shaking success. Members are assured of high quality food at small savings over current retail prices, but to achieve this there has been a considerable expenditure of time and labor on the part of a small group of workers. By weighing the achievements against the expenditures in time and effort perhaps an efficiency expert would deny any gain. The cooperators, even those who have worked the hardest, would take issue with such a conclusion, and they, after all, are the final judges of how well spent their efforts have been. Anyway they are still hard at work.

STUDY QUESTIONS FOR THIS ISSUE

1. What is the difference between *money* income and *real* income?
2. Why is real income more important to consumers than money income?
3. What are some of the things that might slow down recovery or stop it altogether?
4. How did manufacturing production in March this year compare with factory pay rolls and employment?
5. Compared with cost of living in the years 1925–29, which was higher in March 1937: Food, or all other items in workingmen's family living costs?
6. Which has increased faster since March 1933: Cost of living, or labor's money income? How much greater is labor's *real* income now than at that date?
7. Are farmers getting as large a share of consumers' dollars now as they received in predepression years?
8. Labels on which food products are inspected by the Federal Government before they appear on the markets?
9. Under the law, can a manufacturer of canned peas say what he likes on the labels of his products?
10. What information *must* such a manufacturer give on his labels?
11. Is the manufacturer of any food required by law to mark on his product its quality grade?
12. For what foods are there Federal Government standards of quality that apply to the food as consumers buy it?

Our Point of View

The CONSUMERS' GUIDE believes that consumption is the end and purpose of production

To that end the Consumers' Guide emphasizes the consumer's right to full and correct information on prices, quality of commodities, and on costs and efficiency of distribution. It aims to aid consumers in making wise and economical purchases by reporting changes in prices and costs of food and farm commodities. It relates these changes to developments in the agricultural and general programs of national recovery. It reports on cooperative efforts which are being made by individuals and groups of consumers to obtain the greatest possible value for their expenditures.

The producer of raw materials—the farmer—is dependent upon the consuming power of the people. Likewise, the consumer depends upon the sustained producing power of agriculture. The common interests of consumers and of agriculture far outweigh diversity of interests.

While the Consumers' Guide makes public official data of the Departments of Agriculture, Labor, and Commerce, the point of view expressed in its pages does not necessarily reflect official policy but is a presentation of governmental and nongovernmental measures looking toward the advancement of consumers' interests.

CONSUMERS' MARKET SERVICE

Every other issue of the CONSUMERS' GUIDE comments on changes in food supplies and retail food prices to help individual household buyers in understanding market changes and in buying economically. For purchasers of quantity supplies for consumers' clubs and cooperative associations, we issue this food-supply information more briefly in a special mimeographed 2-page release. This *Consumers' Market Service* is issued on the first and fifteenth of each month. Sample copies may be obtained from:

Consumers' Counsel Division
Agricultural Adjustment Administration
Washington, D. C.

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May 17, 1937

GREENS IN THE SALAD BOWL

CONSUMERS' Guide

Issued every two weeks by the Consumers' Counsel, Agricultural Adjustment Administration, Department of Agriculture, Washington, D. C.

Vol. IV, No. 6 May 17, 1937

Late this month a man, bearing a meticulously wrapped package containing an object which was brought to this country in 1892, is going to board a trans-Atlantic vessel. He will carry his parcel to a certain building in Paris. There the package will be opened and the contents examined. If the object is found to be in perfect condition, it will be wrapped up again and carried by the same man back to the United States. If it is not in perfect condition, it will be made perfect and then released for its return voyage.

More precious than all the jewels in the country, the contents of this mysterious package is a cylinder of equal diameter and height, 90 percent of which is platinum and 10 percent iridium. Its metal value is infinitesimal compared with its use value. It is one of two copies, owned by the United States Government, of the ultimate kilogram, safely kept in an underground vault in Paris, which is recognized by 30 countries, our own included, as the perfect standard of weight. Its counterparts in this country are the official gage of accuracy for all standards of weight used in buying and selling commodities. They repose in the National Bureau of Standards at Washington, and once in a long time one of these copies must be carried back to Paris to be weighed and tested against the international standard kilogram. An official of that Bureau carries it over and back.

Common language denoting units of weight and measure has been accepted for so many decades, most modern buyers and sellers have come to take it for granted. But a "pound" was not always a pound; sometimes it came light, sometimes heavy. A "foot" varied with the size of the pedal extremity of some monarch. Units of quantity expanded and contracted, varied from town to town, from seller to seller, from country to country. Out of this confusion, incredible to us now, grew the demand for simple, uniform, fixed, comparable, and universally understandable standards of weights and measures. All civilized countries are now agreed within themselves and between themselves as to what is a "kilogram", a "meter", and, by derivation, what is a "liter." Each country defines its own variations of these units in terms of the international standards.

Today the demand for a common understanding between buyers and sellers is not as to "how much" is in an article offered for sale but "how good" it is. Quality, admittedly, is a highly variable concept. A language expressing it in terms as simple, uniform, fixed, comparable, and universally understandable as our terms for weights and measures will not be easily arrived at. Nevertheless, a beginning can be made in that direction.

Already some retailers are moving toward a common quality language through the Committee on Merchandise Standards of the National Retail Dry Goods Association Platform Commission. This committee is at work on details of a program to develop standards and specifications for staple merchandise, informative labels, and factual advertising. The following eight points, reported in the April issue of the National Retail Dry Goods Association *Bulletin,* are the "highlights" of this plan:

"1. Elimination, where it exists, of misleading, exaggerated, or inadequate elements in factual merchandise information in advertising, labeling, store signs, sales promotion, selling talks of sales clerks, etc.

"2. Development of a plan for completely truthful and adequate factual merchandise information in advertising, labeling, store signs, sales promotion, selling talks, etc.

"3. Cooperation with manufacturers, retailers, and consumer representatives in developing standard terminology for retailer and buying public.

"4. Cooperation with manufacturer and consumer interests in development of standards of performance, durability, measurement, composition, and fiber identification.

"5. Aid of National Retail Dry Goods Association Sales Promotion Division to redefine and further promote standards of advertising practice.

"6. Encouragement of manufacturers to set up own standards, subject to approval of those interested.

"7. Certification of tested materials by recognized bodies, and cooperation of such agencies in issuing certifications identical in scope and meaning.

"8. Full cooperation with proposed Consumer-Retailer Relations Council, now in process of formation."

Some consumer groups, eager for a common quality language or code, are beginning to raise the question: Will we need to define standards for standards, certify the certified? Before consumers can appraise the value of a set of standards proposed for their use, they suggest, some behind-the-scenes facts should be known, such as: Who has set up the standards? How do they compare with Government standards? Were consumers consulted in their definition? How scientific and disinterested is the attitude of the sponsors of the standards? Who finances the policing of the use of the standards?

"Big Boston" belongs to the butterhead lettuces, a group so called because of the oily center leaves.

GREENS IN THE SALAD BOWL

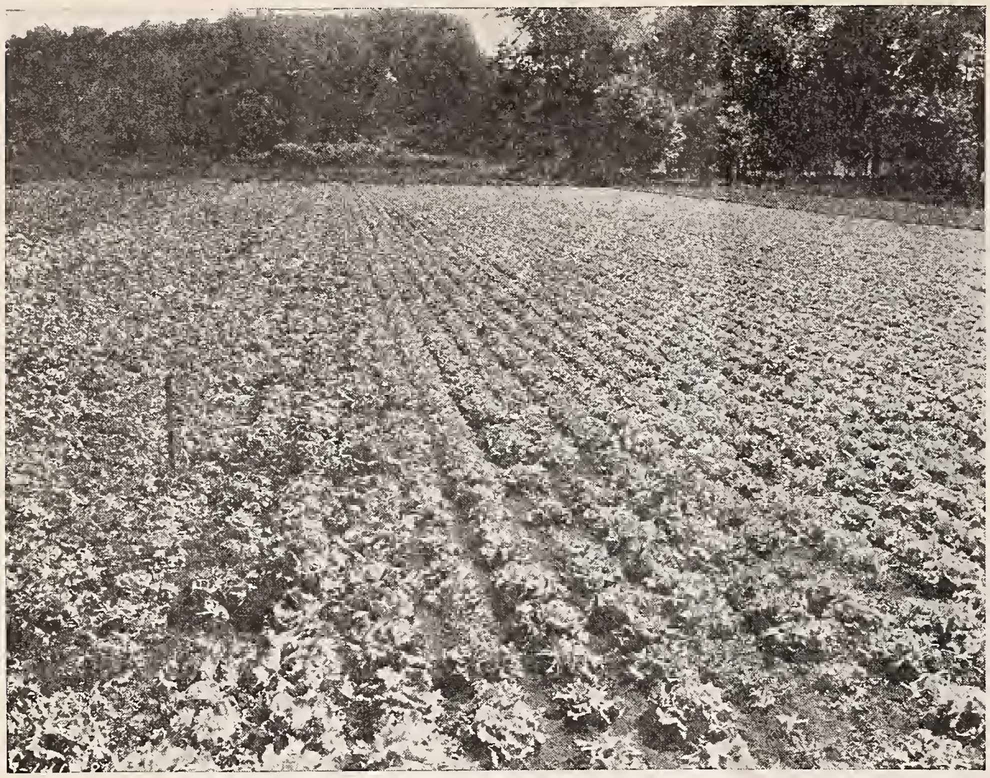
Cows cropping grass, and rabbits nibbling lettuce, have the edge on many humans in the matter of good diet. By nature they prefer what is good for them—the tenderest shoots and the greenest plants—while it may take a 10-year campaign waged by scientists to sell humans the idea of writing leafy vegetables large on the bill of fare.

By now we should not need a food expert to start us on the salad road to health. Taste alone recommends a dish of cool greens for summer days. Rub a wooden bowl with a clove of garlic, toss in crisp lettuce leaves, mix with oil, vinegar, pepper, and salt, and you have a hot-weather dish hard to beat. But there is no reason to pack away the salad bowl for the rest of the year. Vitamins and mineral salts stored in green things provide cheap health insurance during winter months. If you are training for a marathon or hoping to tip the scale at an additional 10 pounds, you won't find the necessary calories in salads. Keep to your beefsteaks and potatoes then. But for the body-building minerals, such as iron and calcium, salad plants are an essential. Thanks to improved methods of growing, refrigerating, and transporting, some form of this highly perishable food can put in an appearance at the dinner table every day of the year.

Most important of our salad crops is lettuce with its four types, the crisp head, the butterhead, cos or romaine, and leaf. Though its rise to popularity is recent, lettuce can trace its origin back hundreds of years to a plant carried from Europe to the Himalayas. It derives its name from the "Lactuca" of classical times, whose milky fluid served the Romans as freckle remover and sedative. In the seventeenth century Lettis won a reputation for cooling a "hot and fainting stomacke."

Crisp head lettuce is the reigning favorite in markets from coast to coast. A good representative of the crisp heads is the New York variety, with its compact, crumpled center of silvery leaves bedded in curling, glossy-textured leaves of dark green. The grocer will probably sell you the New York under the name of Iceberg, for he uses the latter term loosely to designate several rather similar sorts of heading lettuce. The true Iceberg, much like New York, has a distinctive reddish-brown tinge along the outer edges of the center leaves.

Better bids to consumers to look to their "greens" come this year with lettuce supplies a quarter larger than average. Here are tips on how to get variety and flavor in the salad bowl



Lettuce planting practices vary with soil and climate conditions. New York growers frequently plant in single rows, as in this field of "Iceberg" lettuce.

Long the main commercial crop of western lettuce growers, the crisp head type has made its bow along the Atlantic seaboard. However, until a strain is developed to suit new growing conditions, Iceberg will probably not threaten the supremacy of butterhead lettuce in the East.

On its home ground in the East the butterhead holds its own. Smaller, softer than the Iceberg, the butterhead has straight-edged leaves of a rather coarse texture. It gains its name from its tender golden heart leaves. Not so handsome as its western rival, the butterhead makes up in flavor for what it lacks in looks. Of the several varieties—Big Boston, White Boston, Unrivaled, May King—Big Boston is the only one offering competition to Iceberg in the carload movement of lettuce and then only in limited areas. If you live in northeastern United States, look for an abundance of butterheads in the spring months.

Cos or romaine is another heading lettuce. This tall, thin member of the lettuce family comes to market by truck in the spring and fall. Its elongated head is composed of narrow leaves, bleaching from medium green at the outside to creamy white at the center. Thick midribs give the leaves a crunchy, full body, and flavor is rich.

Leaf lettuce makes a good showing at roadside stands during the spring and summer months. Market gardeners like to grow this plant because of its hardy nature, and greenhouse leaf lettuce still finds a ready sale in Pittsburgh, Cleveland, and certain other eastern markets. But both the straight-edged, smooth-leaf type of leaf lettuce and the Grand Rapids variety with its wavy, tightly curled green leaves, are losing ground steadily to the heading lettuces.

Certain buying tips hold good whatever the kind of lettuce. Lettuce should be fresh and crisp, with tender leaves. Dead or discolored spots on the outer leaves indicate decay. A few broken leaves will not affect quality, and the reddish color at the bruises is due to a natural change and is not a sign of decay. Avoid a head with touches of slimy rot. Sometimes a head with a well-developed seed stalk finds its way to market. This stem warns of an overmature head that will be bitter. Even though such a stem has not burst through the leaves, it may be apparent as a swelling at the top or side of the head. An inquisitive thumb can detect this hard core within the leaves.

Should the family grumble about monotony in the salad menu, visit the large outdoor markets or poke about the small shops of the foreign sections for the chicory and endive beloved by the Latin race. These salad plants have an arresting, bitter tang that gives pleasing variation to the salad bowl.

Chicory serves a twofold purpose. Its roots may go into your morning cup of coffee as an adulterant; tops, into salad making. Witloof is the most popular of the chicory varieties, its crisp white heads making a delicious winter salad. The method of growing is this: The Witloof chicory roots first put forth broad green leaves. These leaves are cut off and the roots buried under 8 inches of sand. The weight of this covering keeps solid the second growth of foliage that now pushes up. Blanched white by their protection from the sun, these closely folded leaves look somewhat like celery stalks. They have a finer texture; however, and a sharper flavor. If the grocer doesn't know what you mean by Witloof chicory, ask for Belgian or French endive, since these names are used interchangeably.

Endive has two types little resembling each other. The springing, curly green leaves of such varieties as Giant Fringed dress up a salad bowl to advantage. These come to many markets the year round. The second type—the broad-leaved Batavian endive of the South—is shipped north in fall and winter under the name of escarole. Because escarole leaves in their green state are unpleasantly bitter, they are generally blanched to improve flavor. For this purpose, farmers cover the plants with boards or tie the leaves together to exclude sunlight. The result—a product much like Witloof chicory, with a flavor strong enough to be interesting but not so bitter as to be unpleasant.

Watercress takes first place for piquancy. Even the Babylonians, it is believed, cultivated this plant with its round dark-green leaves and succulent stalks. Watercress thrives in ponds fed from limestone springs such as are found in Virginia and Maryland. On certain hills of the Ozarks lush patches of deep green follow the courses of innumerable small streams. These are watercress beds, so placed as to receive a constant supply of clear water. Except in freezing winter weather, when plants are flooded to protect them from cold, farmers can gather and ship the tips of the stems.

As with all green vegetables, the color sign applies to the salad crops. That is, the greenest leaves provide the most vitamins. Watercress, a deep rich green, runs through practically the whole vitamin alphabet with its A, B, C, G content. Leaf lettuce has these same vitamins. A hearts-of-lettuce salad may be extremely decorative, but a good share of the vitamin value went into the discard when harvester, packer, and retailer stripped off the wrapper leaves. These heavy, prosaic leaves supply Vitamins A and G, to supplement the B and C content of the fragile inner leaves.

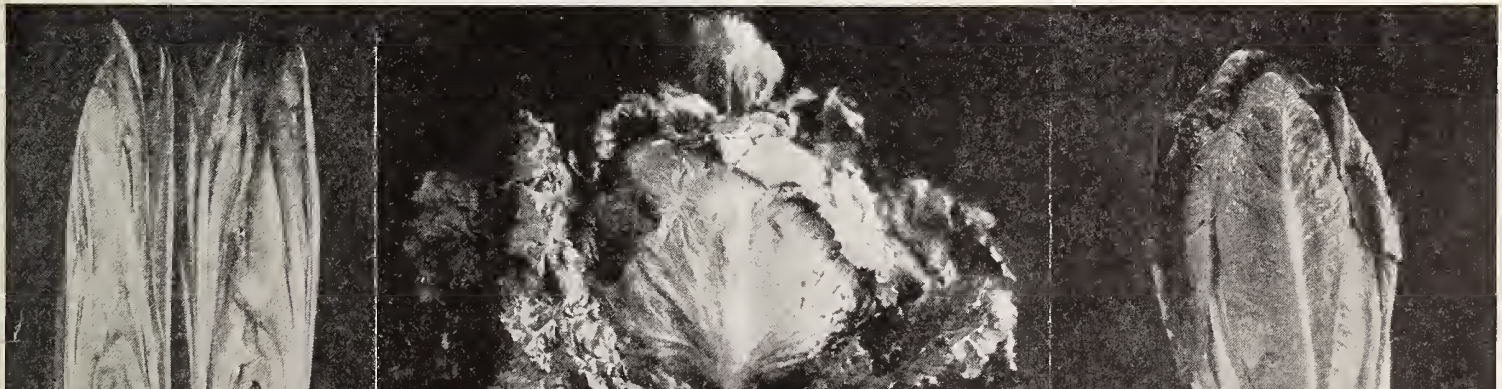
Though the unusual salad crops are prized by connoisseurs, these endives and chicories play a small part in the commercial growing of salad greens. Lettuce is the kingpin of salad crops. It made up about 75 percent of the greens unloaded in the New York City markets in 1936. Elsewhere the percentage would be higher, for New York City lies in the heart of a farming region that makes a point of supplying the less-known greens that are demanded by the city's huge foreign population. No production figures are available for these minor crops. With lettuce it is a different story, for in the United States lettuce has stepped into second place among vegetables in point of farm value.

Figures tell the story of lettuce in the last 10 years. Land devoted to commercial lettuce growing stepped up from 105,500 acres in 1926 to 167,000 in 1936—an increase of more than 60 percent. In 1936 production hit a peak of more than 21,800,000 crates—showing a 75-percent expansion since 1926. Total farm value climbed from $28,000,000 in 1926 to $31,800,000, 10 years later.

Of the 14 States growing lettuce commercially, California has swung far into the lead, credited with 65 of every 100 crates of lettuce produced in the United States. Arizona comes in a poor second with 18 out of every 100. Washington runs third, squeezing New York into fourth place with her 3 out of every 100 crates. States east of the Mississippi raise less than 10 percent of the lettuce crop.

To find what States produce lettuce and when, follow mild weather around the map. The temperate winters of the Imperial Valley of California, Arizona, and southern Florida assure a supply of winter lettuce; central California and the greater part of the Atlantic coast region provide a spring and fall crop; summer lettuce flourishes in the high altitudes of Colorado, Idaho, and the Great Lakes section. This means that lettuce belongs on the all-year vegetable calendar.

(1) Blanched heads of Witloof chicory, also called Belgian or French endive, make a pungent winter salad. (2) "New York", best representative of the crisp head lettuces, travels under several aliases—"Los Angeles", "Wonderful", and "Iceberg." (3) "Cos" or "Romaine" has a distinctive elongated head and a rich flavor that appeals to salad connoisseurs.



Lettuce makes exacting demands wherever grown and by whatever method. It requires good soil rich in organic matter, sufficient water, plenty of fertilizer, a large amount of hand labor, an even temperature, and protection from its worst enemy—excessive heat. Even after the heads have been cut, they call for special care until they are delivered at the customer's doorstep.

In California lettuce is planted on raised beds about 3 to 5 feet wide. Irrigation ditches separate the beds. Tractors prepare the land, plowing, harrowing, and leveling soil in one operation. A tractor-drawn seeding sled shapes the beds and plants the seeds. Crews of men thin out the young plants when they are an inch or two in height. After that the crop grows quickly to maturity. Usually a lettuce head is well grown in anywhere from 90 to 120 days.

At harvest time trailers laden with baskets move down the rows so that cutters can toss the lettuce heads into the containers. These go to packing houses where trimmers, graders, and packers set to work. Into paper-lined crates packers put layers of lettuce heads, sprinkling finely crushed ice between every two layers. Lidders and labelers speed the crate on its way to the refrigerator car which is spotted on a siding. Here men blow snow ice over the car to keep the load in as good condition as possible on its journey—a journey lasting sometimes as many as 10 days.

This business of transporting and refrigerating a perishable commodity, and one of considerable bulk for its value, is partly responsible for the spread between prices paid by the consumer and the prices received by the lettuce growers for their labor. Even more responsible is the elaborate service that the consumer demands from the retailer. He will not accept any but the freshest heads of lettuce, and he wants to be able to make his choice from a large variety of quality and size. Then, too, country shipper and city wholesaler expect a margin of profit for their services in getting the lettuce head from the farm to the consumer's table. In 1936, 64 cents of every consumer dollar spent for lettuce went to distribution costs; 36 cents went to the farmer himself.

On account of periodic overproduction of lettuce, markets have been frequently oversupplied. The result has been that prices to farmers have sometimes dropped to below-cost levels. Even from day to day, prices seesaw. This is not surprising, for shippers act independently, and whenever they hear that supplies are low in any particular city, they rush consignments to that market irrespective of how many of their competitors are doing likewise.

In an effort to guarantee the grower a fair return, in 1934 lettuce growers and handlers in six counties of western Washington adopted a marketing agreement under the Agricultural Adjustment Act. Colorado followed suit in 1935. The marketing agreement plan is intended to regulate daily shipments of lettuce to market so that growers will not suffer from oversupplying the market, and yet consumers will be assured of a regular supply at a reasonable price. What the ultimate effects of such control will be is a matter of speculation.

Unless weather turns temperamental, you should find plenty of lettuce on the market this month. Estimates say that the annual lettuce production this year is about 28 percent above average.

Most popular nonheading lettuce is the "Grand Rapids" whose green spreading leaves rate higher than the paler kind in Vitamins A and G.

Dissecting CONSUMERS' DOLLARS

The Federal Trade Commission reports to Congress on farmers' shares in consumers' expenditures for six important agricultural commodities. Here we give the highlights of its general observations. In later issues will come more facts about some of the farm products analyzed. First of the series will be on tobacco

"Because of the unsatisfactory condition of agriculture and of those engaged therein", Congress in August 1935 ordered the Federal Trade Commission to investigate the factors affecting farm incomes, particularly in depression years.

Find out, Congress ordered, the difference between the price paid to the farmer for his raw materials and the price the consumer pays for the finished products. Was this spread, Congress wanted to know, making processors and distributors richer while farmers became poorer? Do processors and distributors use unfair, monopolistic, and illegal practices to maintain this spread? And, finally, what have farmers done for themselves through cooperative associations to increase their share of the final price? For a full discussion of the purposes of this investigation readers should refer to the article "What Is the Farmer's Share", in the Consumers' Guide for April 6, 1936.

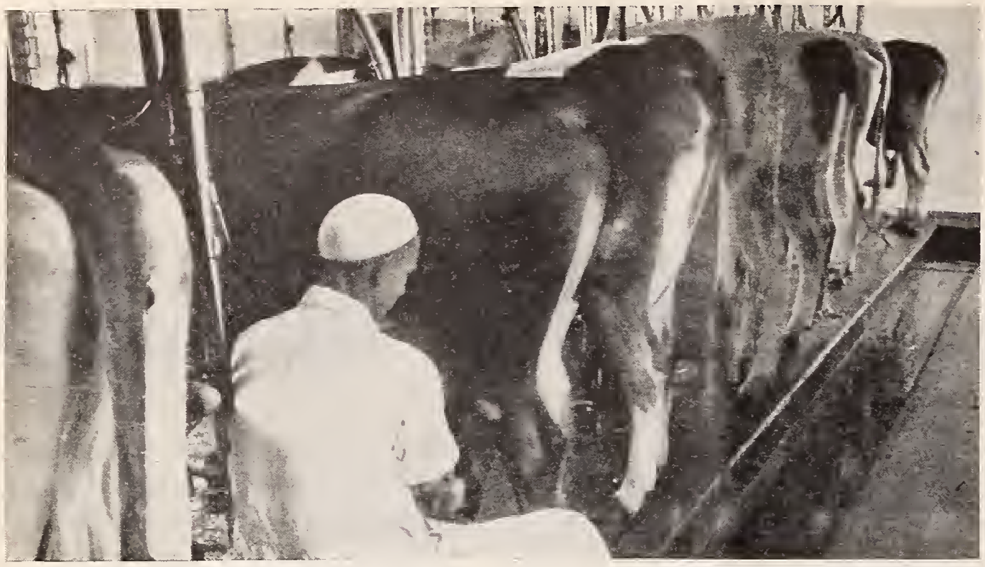
No simple questions these. To answer them fully Federal Trade Commission economists would have had to atomize and analyze the astronomical statistics of American trade for the 6 years, 1929 to 1935. In 1929 there were 49 billion consumer-dollars spent in retail stores. Finding out what share the farmers of the country had in these 49 billion dollars would have required many more than the 1½ years allotted for the study by Congress, many more dollars than the 300 thousand appropriated. Obviously, no complete answer to these questions was possible with the time and money given to the Commission.

Instead, Federal Trade Commission economists selected six principal farm commodities—wheat, cotton, cattle and hogs, tobacco, milk, and potatoes; studied the incomes of their producers, their processors, and their distributors; studied their prices and the methods by which the goods were distributed, and then issued a report in March of this year.

Independent farm-owning farmers are in jeopardy, the Federal Trade Commission reports, and supports its fears with many statistics. Land represents the farmer's major investment. Symptomatic of the farmer's condition, the average value of an acre of farmland declined from $39.60 in 1910 to $31.16 in 1935. The total value of all farm property declined from approximately 35 billion dollars in 1910 to approximately 33 billion dollars in 1935.

Seeking an explanation for the difficult position of farmers, the Federal Trade Commission turned its spotlight on income statistics of farmers and principal processors in the case of each of the six farm products. Cotton farmers' income in 1934, exclusive of processing tax benefits, was 48 percent of its 1929 figure, while cotton textile manufacturers' gross income stood at 96 percent of the 1929 level. Wheat farmers received in 1934, exclusive of Agricultural Adjustment Administration benefits, only 45 percent of their 1929 gross income; gross income of flour millers, on the other hand, was down to 74 percent of their 1929 income. Tobacco farmers' income in 1934, again exclusive of Government benefits, was 78 percent, while tobacco manufacturers' income was 91 percent, of 1929 levels. Barring benefit payments, cattle and hog producers took in 51 percent as much cash as in 1929, while the gross income of meat packers was 58 percent of that year. Milk producers' incomes in 1934 were 64 percent of their 1929 income; the figure for fluid milk processors and distributors was 75 percent.

Addition of benefit payments and subtraction of processing taxes would alter this comparison which the Commission reports in its summary. Payments to farmers in the



Half of the consumer's milk dollar in 1934 went to farmers and transporters.

13 cents of the consumer's average bread dollar in 1935 went to the wheat farmer.*

Less than 50 cents of the consumer's average potato dollar in 1935 went to the potato grower.

farm program brought cotton farmers' income in 1934 to 57 percent of the 1929 figure, wheat farmers' income to 60 percent, tobacco farmers' to 91 percent, and cattle and hog producers' income to 59 percent of their income in 1929. For some of these commodities all of the processing taxes paid by processors in 1934 might be deducted from their gross income of that year in making the comparison. For other processors, part or none of the taxes might be deductible depending upon the extent to which processors were able to add them to the prices of the commodities sold.

Getting a picture of the distribution of the consumer's dollar proved to be a difficult task, since no situation remains constant long enough for a picture to be taken. For specific products, however, the Federal Trade Commission was able to break down the consumer's dollar with approximate accuracy, showing the farmers' share and the margin between. Manufacturers' and distributors' "margins" include, of course, costs of performing their various services and profits, if any.

The average fluid milk consumer paid 12 cents for a quart of milk in 1934. Of this, the average milk distributing company took 6 cents, which left 6 cents to pay the farmers and the agency which carried the milk from the farm to the distributor. Sixty cents of the consumer's butter dollar went to the farmer in the same year, 16 cents to the processor, and 24 cents to the railroads, the retailers, and the other nonmanufacturing agencies which handled the butter.

Flour consumers in 1935 paid approximately $1 for 20 pounds of flour. Of this, 35 cents was the farmer's share, the mills got 22 cents, wholesale and retail distributors collected 33 cents, while the remaining 10 cents went to the other middlemen. Only 13 cents out of the average bread dollar went to the farmer. Cigarette smokers paid 12 cents out of their cigarette dollar to the grower, and almost 47 cents for the Federal revenue stamp which they find on each package.

Potatoes, which undergo no transformation from the farm to the consumer, one might expect, would yield higher returns to farmers, but here, too, the farmer's share is less than 50 percent of the retail potato dollar. From 50 to 70 cents of the potato dollar went to transportation costs, handling fees, and merchandising mark-ups, and in some cases the farmer received only 30 cents out of the potato dollar.

The consumer's meat dollar bought slightly under 4 pounds of meat in 1935. Of this dollar, the farmer received 40 cents, while the remaining 60 cents went to railroads, packing-house companies, retailers, wholesalers, and other middlemen.

Just as all the water in a gallon jug must pass through a narrow bottleneck, so some farm products must pass through a bottleneck in their passage from a vast number of farms to a still larger number of consumers. Such manufacturing and distributing channels which may be controlled with ease by a few economic interests are like economic narrows. Congress asked the Federal Trade Commission to ascertain whether or not such economic narrows existed in America and, if so, to find out who stood guard over them.

Close to half of all the tobacco produced by the tobacco farmers in America, it was found, was purchased by three large tobacco companies. Of the amount going into domestic consumption, these three probably bought close to 70 percent. In 1934 the three largest cigarette

Farmers' share of the consumer's average meat dollar in 1935 was 40 cents.*

12 cents of the consumer's average cigarette dollar in 1934 went to the tobacco growers.*

Farmers' share was 18 cents in the average 1935 dollar spent for sheets, another study shows.*

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* Farmers producing wheat, hogs, tobacco, and cotton who cooperated with AAA received more because of benefit payments.

companies sold 77 percent and the three largest smoking tobacco companies sold 65 percent of these products. Tobacco chewers purchased 69 percent of their chewing tobacco from the three largest chewing tobacco companies, and American snuff consumers bought 95 percent of their snuff from the three largest companies making snuff.

Thirteen flour milling companies in 1935 purchased 65.2 percent of the 1934 commercial wheat crop, and sold 47 percent of all wheat flour in 1935. Ten leading meatpacking companies purchased 51.3 percent of all the cattle and calves produced in 1934, and sold 70.3 percent of all the beef bought by consumers in 1935. One company's sales alone amounted to more than 25 percent of all beef sales to consumers. One milk company handled a volume of milk and milk products representing almost 10 percent of the commercial milk produced. Eleven milk companies controlled the sale of 18 percent of all fluid milk and cream sold in towns and cities, over 25 percent of the butter, nearly 44 percent of the cheese, and more than 60 percent of the canned milk.

Corporations can grow to such huge sizes by various methods: By efficient competition, in giving consumers better quality or lower-priced goods than their competitors; by consolidation, in buying out competitors or combining with them through the formation of holding companies and mergers; or because they produce goods and services that are natural monopolies.

Growth by successful competition often results in certain consumer benefits, but growth by absorption often is at the expense of consumers. The Federal Trade Commission report states, for instance, that in the latter method "these practices were facilitated by unfair methods of competition, or were preceded by price-fixing conspiracies, etc. The history of the great meat packers especially is characterized by a variety of unfair devices, such as railroad rebates, controlling the stockyards, and combining for the purchase of livestock by allotting the quantities to be purchased and thus keeping down the prices. In the sale of their meat products, agreements on selling prices, the possession of private car lines, and great chains of branch houses have helped in giving them the advantage over competing companies."

More than 236 farms out of every 1,000—most accurate figures show—were foreclosed between 1930 and 1936. Neighbors gather around while the work horses of one of these defeated farmers are auctioned off.

Profits are a commonly accepted index of successful operation of a business. Tobacco processors, biscuit and cracker companies, and chain grocers, by this standard, are comparatively successful. A selected group of 14 tobacco companies earned an annual average return on their capital of 15.8 percent from 1929 to 1935. Three biscuit and cracker companies earned for their stockholders 14.6 percent yearly on their capital investment during this period. Six large chain groceries, most successful of all the companies studied, made an average of 17.4 percent per year on their capital investment for the same 7 years.

Profits of milk processors and distributors, like most others, were lower in the latter half of the period than in the earlier years; for the entire period the annual average return on the investments of 10 companies was 9.57 percent. Four wholesale baking companies netted 8.76 percent yearly, and 16 wheat middlemen 10.59 percent.

Eleven wheat processors earned 7.8 percent annually in this period; three wholesale flour distributors averaged 9.6 percent, and three drug store chains 8.3 percent. For these three groups of companies the worst year was 1932.

Not all processors made money, however; a group of 11 leather companies and another group of 3 cotton processors showed losses for the 7-year period as a whole. Generally, however, processing and distributing companies managed to earn something on their capital investment. A group of 11 meat packers' annual earnings averaged 4.3 percent; 12 shoe manufacturers, 4.8 percent; 7 butter brokers and wholesalers, 4.7 percent; and 2 wholesale drug companies, 6.3 percent.

Salaries also came under the scrutiny of the Federal Trade Commission. Highest reported total compensation in any company studied by the Federal Trade Commission was that of the president of a tobacco company, who received more than a million dollars in 1 year. Many salaries over $45,000 were reported. In the tobacco industry the average compensation per officer, the Commission reported, was $55,000 a year. Officers of milk distributing companies also received very high salaries in some cases. "On the other hand", to quote the Federal Trade Commission, "the salaries for the officers of cooperatives are distinctly too low. They averaged only a little more than $5,000."

To determine the extent to which unfair, fraudulent, or injurious methods are employed in the grading, warehousing, and distributing of farm products, the Federal Trade Commission looked at the potato. Investigation here revealed specifically dishonest practices, which have since been the basis of indictments and criminal prosecutions. Marketing of potatoes, the Commission discovered, was largely controlled by the companies which financed the farmers. Where farmers are unable to finance themselves, finance companies often charge what the Commission believes to be excessive interest rates and marketing fees.

Potatoes are marketed by local and national marketing agencies, terminal market dealers, and commission merchants. In certain areas the Commission discovered that potatoes were frequently misbranded—though this is a violation of Federal law—and that illegal price-fixing had been carried on.

Useless handling of potatoes, paid for finally by consumers in high prices and by farmers in low returns, were found to be prevalent in New York and Chicago. Other abuses, such as the imposition of useless charges and the maintenance of cartage monopolies, sometimes enforced by violence, were also found.

No general remedy was offered by the Federal Trade Commission for the problems of farmers and consumers. Instead, it made a series of specific recommendations designed to correct specific abuses.

Monopoly it would curb by amending the Clayton Antitrust Act. This Act, originally passed in 1914 by Congress to prevent the growth of monopolies, has a large loophole, according to the Federal Trade Commission, which makes its enforcement ineffective. The acquisition of the capital stock of one company by another when this would lessen competition or make for monopoly is now forbidden under this law. But there is no prohibition of the direct purchase of a company's physical assets by a competitor. Through this breach in the law many corporations have marched to dominant positions in their industries. Expansion by this method has taken place in the meat-packing industry, the flour-milling business, among milk distributors, in the chain-store networks, and among bakeries.

Going concerns are so intricately bound together that even when a court decree against a monopolistic practice is obtained, it is sometimes impossible to enforce the court order. In 1920 the Packer's Consent Decree ordered certain meat packers to dispose of some stockyards they owned. Now, 16 years later, the decree still remains partially unenforced.

To overcome this problem the Federal Trade Commission believes that it should be given the power by Congress to act to prevent monopoly before the assets of merging companies become inextricably mixed together.

To make these measures doubly sure, the Commission recommends a provision in the law to prevent a corporation from buying the assets of a competing company when the combined assets of the two companies would exceed a certain amount. Still another recommendation would forbid one company from buying the assets of a competitor when the combined value of the two companies would exceed a certain percentage of the total assets in the industry.

Other abuses it would correct by public control of grain elevators, by more effective control of exchanges which deal in commodities, and by the adoption of a new type of tobacco tax based not on quantity or weight but on the retail selling price of the tobacco product, and by the extension of credit facilities to farmers through the Farm Credit Administration.

Farmers through their cooperatives, the Federal Trade Commission suggests, offer a way to bring about orderly marketing for themselves, to reduce the spread between farm and city prices, eliminate the useless handling of commodities, and to enforce the use of standard grades as the basis of sales of farm commodities.

OUR POLL

VOTES so far are unanimously against "technical jargon", but 4 to 1 in favor of more facts to help in judging the relative quality or usefulness of commodities, in the poll we suggested (in the April 19 issue, page 2) we'd like to take. We proposed no scientific test of consumer opinion on this point, but a few of our readers have generously volunteered their votes. One New York City consumer is content with the "constructive, helpful, and accurate information" she gets from stores. Another, apparently less satisfied with available information, votes for "specification labels on rugs, also truth in advertising." So far, in the limited replies which have reached us as we go to press, the balance of opinion is in favor of "information and more information", but "make it nontechnical." Any more votes for or against more informative labeling?

Consumers' BOOKSHELF

More publications on consumers' cooperation, supplementing those reported in our April 5 issue, are listed here in the twelfth installment of our bibliography for students of consumer problems

Report of the Inquiry on Cooperative Enterprise in Europe, by Jacob Baker, Leland Olds, Charles E. Stuart, Robin Hood, Clifford V. Gregor, and Emily Cauthorn Bates. 1937, 321 pp., charts. Address: Superintendent of Documents, Washington, D. C. 65 cents. The material in this report is based on a 2½ months' study of European cooperatives. It is in four sections. Part I, The Methods and Relationships of Cooperative Enterprise, a description of the way cooperatives work and a statement of their general policies regarding relations with agriculture, labor, the State, etc. Part II, The Meaning of Cooperative Enterprise to America, consists of statements by the individual members of the inquiry as to the place of cooperative enterprise in America. Part III, Cooperation at Close Range, gives reports on individual cooperatives in various sections of Europe. Part IV, Appendixes, gives a brief review of cooperation in each of the countries visited and information on special cooperative activities such as housing and rural electrification. Some statistical tables and charts are included.

Consumers' Cooperative Statutes and Decisions. 1937. Address: Consumers' Project, U. S. Department of Labor, Washington, D. C. Free (in press). A collection of the consumers' cooperative statutes in the United States, annotated with Court decisions.

CREDIT

Credit Unions: A Story of Cooperative Credit. Lesson II, Cooperation. Undated, 16 pp., mimeographed. Address: State of Minnesota, Department of Education, St. Paul, Minn. 10 cents or 25 cents with a series of five other bulletins on cooperation listed previously. Treats of the history, contribution to members, and operation of credit unions. Contains questions on the text and lists additional sources of information on credit unions.

Federal Credit Unions—Cooperative Thrift and Credit, Circular I. 1936, 6 pp. Address: Farm Credit Administration, Washington, D. C. Free. Defines credit unions and describes briefly the organization and management of Federal Credit Unions.

Federal Credit Unions—Cooperative Thrift and Loan Associations. Circular 10. Revised May 1936, 8 pp. Address: Farm Credit Administration, Washington, D. C. Free. A brief description of the organization and operation of Federal Credit Unions, with a short historical note on their development.

First Bookkeeping Steps for Federal Credit Union Treasurers. December 1935, 4 pp., mimeographed. Address: Farm Credit Administration, Washington, D. C. Available free of charge only to credit union officials or students of credit union problems. Suggestions on how to proceed in setting up a bookkeeping system for credit unions.

Loans to Farmers' Cooperatives, Circular No. 6. Revised September 1936, 12 pp. Address: Farm Credit Administration, Washington, D. C. Free. A description of the origin, location, purpose, and function of the Banks for Cooperatives. Outlines the services which cooperatives may obtain from the banks for purchasing as well as marketing purposes.

Manual of Accounting Procedure for Federal Credit Unions. January 1936, 36 pp., multigraphed. Address: Farm Credit Administration, Washington, D. C. Available free of charge only to credit union officials and students of credit union problems. This manual was prepared for Federal credit unions in order that their accounts and accounting records might be maintained in a uniform and accurate manner.

STATISTICS OF COOPERATION

Activities of Consumers' Cooperative Wholesale Societies in 1935. Reprint from the Monthly Labor Review, Serial No. R. 401. June 1936, 10 pp. Address: Bureau of Labor Statistics, U. S. Department of Labor, Washington, D. C. Free. An analysis of the services, membership, resources, and business operations of cooperative wholesales for 1934 and 1935. Includes a brief section on wholesales for self-help cooperatives.

Consumers', Credit, and Productive Cooperation in 1933, by Florence E. Parker, U. S. Bureau of Labor Statistics. Bulletin No. 612, 1935, 85 pp. Address: Superintendent of Documents, Washington, D. C. 10 cents. A review of developments from 1929 to 1933. An analysis in terms of numbers, membership, resources, and volume of business of local and retail consumers' societies, health associations, central consumers' organizations, educational organizations, credit unions, labor banks, mutual savings banks, building and loan associations, and workers' productive associations.

Consumers' Cooperation Throughout the World in 1935. Reprint from the Monthly Labor Review, Serial No. R. 499. January 1937, 17 pp. Address: Bureau of Labor Statistics, U. S. Department of Labor, Washington, D. C. Free. Gives data on the number, type, membership, production, and sales of cooperatives in specified countries throughout the world.

Cooperative Movement in the United States in 1933. Reprint from Handbook of Labor Statistics, Bulletin No. 616. 1936, pp. 57–69. Address: Bureau of Labor Statistics, U. S. Department of Labor, Washington, D. C.

Statistics of Farmers' Cooperative Business Organizations, by R. H. Elsworth. Bulletin No. 6. May 1936, 129 pp., charts. Address: Farm Credit Administration, Washington, D. C. Free only to officials of cooperative organizations. A statistical analysis of the development of the different types of cooperatives, with specific information on cooperatives handling cotton, dairy products, forage crops, fruits and vegetables, grain, livestock, nuts, poultry and poultry products, tobacco, and wool. Also includes farmers' purchasing cooperatives, credit associations, mutual fire insurance companies, cooperatives supplying light and power, and trucking associations.

BIBLIOGRAPHIES, DIRECTORIES, AND STUDY COURSES

Bibliography for Leaders and Members of Cooperatives in Resettlement Communities. 1936, 1 p., mimeographed. Address: Resettlement Administration, Washington, D. C. Free. A selected list of cooperative literature from governmental and nongovernmental sources.

Consumers' Cooperative Societies (Basic Information Sources), September 1936, 18 pp., mimeographed. Address: Marketing Research Division, Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce, Washington, D. C. Free. A selected list of governmental and nongovernmental information sources on consumer cooperation in the United States and abroad.

Cooperation in Agriculture—A Selected and Annotated Bibliography, compiled by Chastina Gardner. Bulletin No. 4. May 1936, 214 pp. Address: Farm Credit Administration, Washington, D. C. Free only to persons making a study of agricultural cooperation. A list of the more important sources of information regarding agricultural cooperative enterprise with special reference to purchasing, marketing, and credit cooperatives. Gives a bibliographical sketch of the author of each publication and a digest of the contents. Most of the works listed are in English, though some are in other languages.

Public Affairs Pamphlets (Revised), by Office of Education, U. S. Department of Interior. 1937, 80 pp. Address: Superintendent of Documents, Washington, D. C. 10 cents. A bibliography on cooperation and other subjects suitable for forum discussion. Lists author, price, and publisher.

A Selected List of Government Publications of Interest to Consumers. March 1937, 13 pp. Address: Consumers' Project, U. S. Department of Labor, Washington, D. C. Free. A selected list of government publications on consumer cooperatives, quality standards, and commodity information.

Here

Sources of Information on Consumer Education and Organization. Publication No. 1, 1936, 33 pp. Address: Consumers' Counsel Division, Agricultural Adjustment Administration, Washington, D. C. Free. Lists Federal agencies and some nonprofit private organizations performing consumer services.

On the Shelf near the Stove

SECRET of many famous dishes is the dash of seasoning which gives them their distinctive flavor. Cooking meals graduates to culinary art in proportion to the cook's knowledge of the use of condiments to give a subtle taste to food. Of all the seasonings on the shelf near the stove, salt is the most common.

Salt is a white crystalline compound, known chemically as sodium chloride, which is obtained from deposits in the earth or by evaporation of natural brines, such as sea water. In 1935 nearly 8,000,000 tons of salt valued at $21,000,000 were produced in the United States. Only a portion of this was processed for eating purposes—3,837,613 short tons were used by manufacturers in its briny state. Salt has over 1,500 recognized uses. There is a pinch of salt in the clothes we wear, the glasses we use, the cars we drive.

Table salt, which we often buy in the little cardboard containers with the shaker top, is a fine-grained salt to which perfectly harmless chemicals, if their presence and amount are declared on the label, may be added to give the salt the noncaking quality which consumers want. A few hundred thousandths of 1 percent of a salt of iodine, usually potassium iodide, is often added to table salt. A lack of iodine in the diet may cause an enlarged thyroid. The most usual way of getting one's necessary quota of iodine is in drinking water. In certain sections of the country known as "goiter belts", where iodine is lacking in the water, iodized salt is extensively used by consumers. Price of iodized and ordinary table salt is the same.

Salt is a seasoning used by people the world over, but individual tastes and national culinary traditions dictate the selections of seasonings, especially the spices one finds in kitchen cupboards. When we speak of spices we usually include all the aromatic vegetable products, such as pepper, mustard, ginger, etc., which are added to food to bring out its flavor or to give a flavor where little exists. Spices contain volatile materials known as essential oils which give them their odor and taste. Though spices are negligible in food value, their addition to food is said to stimulate the gastric juices and hence make food more digestible. For many centuries these pungent buds, flowers, fruits and seeds, roots, bark and leaves of herbs, shrubs, or trees, growing wild in the equatorial countries and carried over circuitous routes to Europe, were the luxury of kings. Today scientific cultivation and rapid and steady transportation make a shelf of spices available to almost every family.

Small items in the food budget, seasonings loom large in importance when budgeters transform low-cost diets into appetizing dishes

Most of the spices we buy are imported from other countries. Government standards for spices require that they be clean, sound, and true to name, and that no portion of their volatile oil, which gives them their flavor, be removed. The Food and Drug Administration is on guard to see that ground shells, or exhausted spices—spices from which the essential oil has been removed—have not been added to the pepper, ginger, cloves, and other spices we buy. All imported foods—spices included—

must get their O. K. from this Administration before they can be marketed in this country. Chemical analysis is needed to test the purity of spices, but a consumer when selecting them would do well to both taste and smell them to judge their potency. Some spices of poor quality, such as a low grade of cinnamon, are practically flavorless. It is a far-sighted economy to buy the best quality spices.

In buying spices one should always buy by weight rather than size of container. Perhaps no other food is packaged in as varied sizes of containers as spices. The size of a can can easily give the impression that it contains more spice than it does. Reading the label is the good consumer insurance against buying slack-filled spice boxes.

Black and white pepper are two of the common condiments which we find on the dining-room table and on the kitchen shelf. Both are products of the same pepper vine grown in the East Indian Islands, southern India, French Indo-China, and Siam. Ground black pepper, which is stronger and hotter than white pepper, is prepared from the dried immature berry of the pepper vine. White pepper is made from the mature berry after the outer dark husk has been removed. Because ground pepper loses its pungency if allowed to stand too long, many people buy the whole pepper berries and grind them as they use them. Common varieties are Singapore, Acheen, Lanpong, Java, Tellicherry, and Alleppy, but there are over 40 different varieties of pepper plants, the fruits of which have a slightly different flavor and color. When ground, some are dark or light grayish in color, others have a greenish shade. The consumer particular about his pepper soon learns to identify the flavor he prefers by the color of the grind.

Red pepper, which is hotter or stronger than black pepper, is made from the red, dried, ripe fruit of any species of Capsicum. Cayenne pepper, the hottest of all peppers, is made from a certain small-fruited species of Capsicum. Red pepper mixture contains some cayenne, but a package labeled cayenne pepper, according to the U. S. standards, must be made from the berries of *Capsicum frutescens.*

Piperine, an alkaloid of pepper, stimulates perspiration, thus having a cooling effect on the body if a sufficient amount is eaten. For this reason, pepper is widely used in seasoning food in hot countries. The literal translation of the Mexican dish "chili con carne" is "red pepper with meat." Cayenne pepper is a common constituent of curry powder which is the high-flavor mark of many dishes popular in India. Red pepper is often an ingredient of the ginger ale we drink to "cool off." It also heightens the flavor of many of the sausages and prepared meats which we buy.

Nearly one-half mile below the surface of this land runs a salt vein. A well is drilled down to the vein; a pump brings to the surface the brine from which salt is captured and then refined.

SPICES

From far-off sun-baked lands come many of the little berries, buds, and barks—rich in aromatic oils—which give piquance and pungence to the cheapest of foods. East India ships us, among other spices, her pepper (above), mace—the fibrous coating of the nutmeg (lower left). From Ceylon comes cinnamon (lower right), prepared from the bark of these sticks.

Both pepper and salt have had a romantic and bloody history. Nations have gone to war over salt mines and pepper vines. The gentler spice, paprika, which, because of its flaming color, we use to garnish food as much as we do to season it, does not have such an adventurous past. It is a product of a plant grown extensively in Spain and Hungary. The highest grade of paprika, made from selected pods of the dried ripe fruits of *Capsicum annuum* from which the placentae, stalks, and stems have been removed, is known as Hungarian Rosenpaprika. Olive oil is sometimes added to paprika to heighten its color. It has no other purpose. A paprika label declaring "olive oil added" means that the color of the product has been produced in part by added oil. Paprika should be kept in a dark place, as its color fades if it is exposed to light for any length of time. Also, if kept too long it may develop a slightly rancid odor due to the decomposition of the fixed oil it contains.

Allspice, much in demand in every household during the canning season, is the nearly ripe dried fruit of the pimiento tree. It is also known as pimiento and Jamaica pepper, but it is popularly called allspice because its flavor is said to resemble a mixture of clove, cinnamon, and nutmeg. Though native to Jamaica, which exports the greatest amount, it is grown in other countries. A cheaper spice than the clove, it resembles the clove in its reddish-brown color and small nail-like shape.

The fragrant clove is a dried flower bud of an evergreen tree of the Myrtle family cultivated in the Molucca Islands, Guiana, Ceylon, India, Zanzibar, and the East and West Indies. Cloves of good quality are plump, bright reddish brown in color, and when pressed will readily exude oil. Exhausted cloves are shriveled and dark in color. The common way of adulterating cloves in the past was by mixing exhausted cloves and clove stems, which have very little spice value, with cloves of good quality. According to Food and Drug standards, a product labeled cloves should not contain more than 5 percent stems. In Persia, centuries ago, cloves were an important ingredient in love potions. Today they are used in many places to make perfume in imitation of carnations, and the vanillin in clove is used to manufacture imitation of vanilla extract. In the kitchen the clove has numerous uses. It is a favorite seasoning used in baking ham, and it enhances the flavor of many pickles, ketchups, and preserved fruits.

Capers, commonly used in Europe but rather rare in the average American kitchen, is a flower spice, coming from a shrub which is native to the countries bordering the Mediterranean. In lands where it is cultivated for a culinary use, the buds are picked daily during June and July and kept in the dark for 3 or 4 hours and then are pickled in vinegar. Capers are small, somewhat four-angled in shape and are dark greenish brown in color, mottled with bright green.

Dried leaves of many shrubs and trees are used to give a distinctive tang to food. Bay leaves used to flavor fish, soups, custards, and puddings, come from the sweet laurel plant whose leaves were gathered by the Greeks and Romans for wreaths of victory. French cooks, famed for their use of bouquets—a mixture of sweet herbs—consider a bay leaf an essential part of their spice combination.

Dried leaves of the common garden sage, which grows in southern Europe, is a spice popularly used with meats and dressings. Austrian sage, known as Dalmatian, is considered the best quality. Next in quality is the French, then Italian, then Greek. In buying sage you will usually find the word Dalmatian, French, or Italian on the label.

Thyme and marjoram are two seasonings which the mint family contribute to the pantry shelf. Dried leaves and the flowering tops of these plants are used to flavor many sauces and soups.

Seeds of plants as well as their flowers and leaves are used as condiments to make eating more than a humdrum necessity. The most important ingredient of the prepared mustard which we spread on our hot dogs is flour made from ground mustard seeds which comes from an annual herb which grows in both Europe and America. The seed has a large amount of volatile oil but unlike most spices it demands a liquid to bring out its flavor. Many people prefer to make their own mustard, and buy mustard flour and mix it with water, vinegar, or milk immediately before use. In mixing mustard, tepid or cold but never hot liquid should be used. There are 2 types of mustard seeds in common use, known as black or brown and white or yellow mustard. The paste we use on our meats is usually made from a mixture of both—black for aroma and white for pungency.

Nutmeg and mace are both products of the nutmeg tree native to the East Indian Archipelago. Nutmeg is the dried, hard seed, and mace, which is retailed in powder form, is made from grinding the coating surrounding the nutmeg. The flavors of the two are quite different. Mace is added to sauces for fish, to pickles, and to ketchup. It is said to have a "smooth" flavor. Nutmeg is a favorite spice for sweet dishes, such as custard. It also gives a filip to eggnogs, ales, and punch. There are two general varieties of mace, known as East Indian and West Indian mace. West Indian mace which is commonly used is light yellow in color. Many spice connoisseurs,

Many herbs used for seasoning food can be cultivated in the home garden. The flagstone walk and terraces of this herb garden, near Washington, D. C., are bordered with a bouquet of spices—Thyme, sweet marjoram, tansy, sage, and summer savory.

however, prefer the darker East Indian mace which they think has a superior flavor. Each consumer can judge for herself by sampling the two varieties.

Nutmegs are sold whole or in powder form. Normal nutmegs should be well rounded and symmetrical and brown in color. "Shrivels", or nutmegs that arrive in this country more or less shriveled, are often used for the powdered product. Ground nutmeg varies in value according to appearance and color. Good sound nutmegs will produce a light-brown grind, while a dark grind is often an indication that the spice has been processed from imperfect seeds.

Cinnamon, used in so many holiday dishes that it is often called the "joy spice", is the bark of either the cinnamon or cassia tree. True cinnamon of the finest quality, is the dried bark of the young branches of a small tree cultivated chiefly in Ceylon. The thin pieces of bark when scraped and dried curl into quill-like rolls and are usually orange yellow with wavy lines of lighter color. Different varieties of cinnamon have different flavors varying from the mild, delicate flavor of Ceylon cinnamon to the strong and pungent flavor of the Saigon cinnamon. The quality of cinnamon depends on the amount and flavor of oil in the bark.

China cinnamon which is darker and coarser than the Ceylon, Batavia, or Saigon spice, has a smaller amount of essential oil, and is often practically flavorless. Though you will often see a product labeled Ceylon, Batavia, or Saigon cinnamon, you will seldom find the trade mark China cinnamon. Usually it will be marked merely "cinnamon." Though high-grade cinnamons cost more they give the best results. Cinnamon should always be kept in a well-closed container.

Ginger, one of the earliest-known spices, mentioned in Sanskrit literature and in the Talmud, is the root of an herb cultivated in tropical countries. Jamaica ginger, grown in the West Indies, is the best quality. Though Canton, China, makes a specialty of exporting ginger preserved in a sugar syrup, most ginger comes to this country in the dried state. In the trade the rhizomes, or underground stems of the ginger plant used for spice, are often called "hands" because of their somewhat palmate shape. To prepare the ginger for market the outer coating of the "hands" is removed, then they are washed and dried in

Workers in this Grenada warehouse are grading nutmegs. Best quality are sold for spice. Very small, damaged, and broken nutmegs are sold for oil which is often used as a flavoring for dentifrices and making perfumes.

the sun—and often as a protection against mildew they are "bleached" or coated with lime. Both the irregularly shaped pieces of ginger and the powdered ginger vary in color from light yellow to brown. The best quality gingers usually are of the lighter shades and when a piece is broken, the edges have a starchy, fibrous, resinous appearance. At one time ginger was used for spicing wine. Today it is the main ingredient of the English ginger beer and our ginger ale. It also adds zest to many courses of a dinner from soup to dessert.

Preliminary estimate of the total number of pounds of spices imported into the United States during 1936 is 141,898,046—valued at $12,526,555. Black unground pepper led all other spices, the estimated total being 69,345,389 pounds.

"OUR farmer friends need *your* help!" radioed a great national retail distributor of foods in mid-May. "There is a greater than normal supply of eggs . . . and producers everywhere require assistance to help move the surplus. You can help the farmers—and at the same time help *your* food budget—by serving eggs more often. You'll save money—and aid the country's egg producers in the bargain." . . . Other distributors have joined in this move to help producers and consumers. The National Association of Food Chains has called on its members to "cooperate with producers by reducing spread on eggs wherever possible in order to increase consumption, especially on best-grade eggs." For 2 months distributors of eggs—strategically placed to boost, if they will, producer-consumer interests—are asked to pull together in this effort to help producers get prices which will keep egg production on the upgrade and to help consumers get adequate supplies at fair prices.

STUDY QUESTIONS FOR THIS ISSUE

1. Where is the "ultimate" unit of weight, against which scales and weights used in business are measured for accuracy?
2. Which are more important in the writing of information labels on goods: Adjectives or nouns?
3. How many of the four types of lettuce can you find in your markets?
4. Which lettuce leaves, the outside or inside, have the most vitamins?
5. Why are salad greens an important food?
6. What did the AAA marketing agreement for lettuce growers and handlers hope to accomplish?
7. Are the spices we import from abroad inspected by a Government office?
8. How many spices do you now have on your kitchen shelves? From what countries do these spices come?
9. What facts did Congress wish the Federal Trade Commission to discover in its study of agricultural income?
10. How did 1934 incomes of milk producers compare with incomes of leading fluid milk processors and distributors?
11. How much of the dollar consumers paid in 1935 for bread went to wheat farmers?
12. What share of all the tobacco produced in 1934 was purchased by three manufacturing companies?
13. What changes in the Clayton Antitrust Act does the Commission suggest as a check on monopoly?

Our Point of View

The CONSUMERS' GUIDE believes that consumption is the end and purpose of production

To that end the CONSUMERS' GUIDE emphasizes the consumer's right to full and correct information on prices, quality of commodities, and on costs and efficiency of distribution. It aims to aid consumers in making wise and economical purchases by reporting changes in prices and costs of food and farm commodities. It relates these changes to developments in the agricultural and general programs of national recovery. It reports on cooperative efforts which are being made by individuals and groups of consumers to obtain the greatest possible value for their expenditures.

The producer of raw materials—the farmer—is dependent upon the consuming power of the people. Likewise, the consumer depends upon the sustained producing power of agriculture. The common interests of consumers and of agriculture far outweigh diversity of interests.

While the CONSUMERS' GUIDE makes public official data of the Departments of Agriculture, Labor, and Commerce, the point of view expressed in its pages does not necessarily reflect official policy but is a presentation of governmental and nongovernmental measures looking toward the advancement of consumers' interests.

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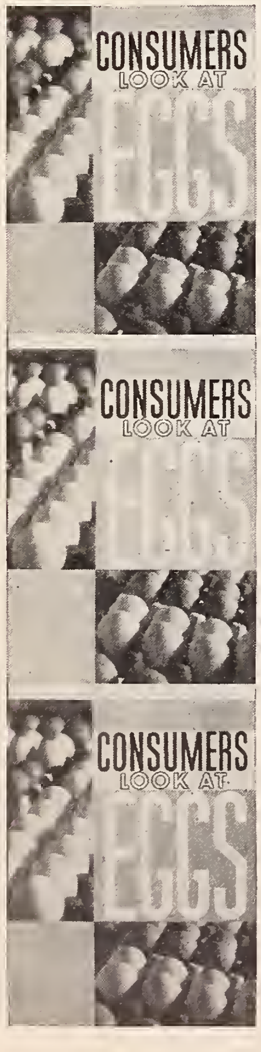
YOUR ANSWERS ARE HERE



How can you be sure, when you buy eggs, that you are getting fresh ones? How much egg do you get in a dozen? Are storage eggs inferior to fresh? What are the advantages to producers and consumers in grading? Who should do the grading? . . . Answers to these egg-buying problems come in this illustrated bulletin—"CONSUMERS' LOOK AT EGGS"—the first of a series of consumer study outlines, released by the Consumers' Counsel Division of the AAA and the Consumers' Project of the Department of Labor. Two carefully planned programs for consumer groups, schools, cooperatives, tell you how to prepare for the study, conduct the meetings, and clinch the facts which consumers should know when they go to market for this essential food.

Copies, priced at 10 cents each, are on sale by the

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CONSUMER STAKES IN SMOKE

CONSUMERS' Guide

Issued every two weeks by the Consumers' Counsel, Agricultural Adjustment Administration, Department of Agriculture, Washington, D. C.

Vol. IV, No. 7 June 14, 1937

Not luck but law enforcement is responsible when consumers get full measure for their money and honest dealers are protected against the unfair competition that comes from short-weighing. So obscurely and quietly do most weights and measures officials work that few merchants realize this, fewer consumers appreciate it. Once a year Washington reminds the country of this essential consumer protection when weights and measures officials from all over the country gather for their national conference with National Bureau of Standards experts. Their conference this year occurred early in June.

"If the consumer movement is not getting behind you", Consumers' Counsel D. E. Montgomery told conferees in his address on Consumers' Interest in Adequate Weights and Measures Supervision, "it is only because the need of doing so has not been sufficiently brought home to consumers."

Consumers buy in the course of a year 19 billion pounds of potatoes, more than 21 billion pounds of meat, poultry, and eggs, more than 27 billion pounds of fresh fruits and vegetables, 15½ billion gallons of gasoline, 445 million gallons of lubricating oil. "All but a very small part of these enormous totals", Mr. Montgomery pointed out, "is measured out to the consumer in millions of small retail transactions across the counter. A very minor average error in weight or measure could mount up to a national total of very real significance. Only an insignificant fraction of the total amount of money involved in the transfer of this huge store of commodities to consumers would be required adequately to police the weights and measures aspect of these transactions."

Pointing up this fact are figures from the Bureau of Standards on what adequate weights and measures enforcement would cost in one State, Virginia. This averages 30 cents per family in a year, equal to the cost of 15 pounds of potatoes compared with the 770 pounds the family uses in a year, or 1¼ pounds of meat compared with its 650 pounds total consumption, or 2 gallons of gasoline out of 500, or 1½ quarts of lubricating oil out of 14 gallons. Any one of these items would meet the whole cost. "Certainly, if shown these facts", the Consumers' Counsel observes, "consumers will not object to the expenditure of 15 pounds of potatoes to assure themselves fair weight on all the potatoes they buy in a year and on all the other things they buy by weight or measure. If they average short weight by as little as ⅓ ounce on each pound of potatoes, this item alone would cost them as much as the annual assessment for adequate supervision."

Responsibility for making consumers weights-and-measures conscious rests largely with enforcement officials. Mr. Montgomery urged on them a consumer education program in each of their localities through consumer organizations. Consumers' Counsel Division will shortly send questionnaires to weights and measures officials over the country to elicit facts useful to consumer groups wishing to study the work of their local inspection service and appraise its efficiency against similar services in other cities and States.

Significant to consumers, too, was the address by Wisconsin's Chief Inspector Warner on the multiplicity of can sizes of canned foods, confusing to consumers, confounding to inspectors. "In a recent weights and measures school where nearly all of the participants were active weights and measures officials", Mr. Warner reported, "students were asked for an answer in writing to three questions: (1) Are you familiar with the trade designations for fruit and vegetable cans? (2) Name the trade designation of three cans. (3) How much does each of the cans named hold, or what is the capacity stated on the label? Results showed this: 25 were unable to make any answer; 5 stated that they were familiar with the trade names of the cans; only 2 were able to name three sizes and state what they held.

"If people who are trained in weights and measures work and who are constantly checking on packages that are sold in grocery stores do not know the trade designations", observed Mr. Warner, "it certainly is apparent that it cannot be expected that the housewife is going to know them. The argument in favor of our present system is sometimes to the effect that the cans are labeled with their contents. This is true, but this labeling does not mean very much to the purchaser; further, the purchaser cannot very well read the label until after the purchase is taken home, and then it is too late to do anything about it."

Fifty-four empty cans, bought from shops hither and yon over the country, exhibiting the confusion inevitable to consumers and the complicated job put upon weights and measures inspectors, were placed on display at the conference. Against these 54 cans were displayed 7 others, easily recognizable as distinct in size and capacity. Canners, Inspector Warner observed, could better serve consumers and at the same time cut costs by restricting their cans to the seven he exhibited.

Through the courtesy of Fortune Magazine, we publish on the cover of this issue a photograph by Richard Carver Wood.

A crack runs down this weather-worn wooden image of Sir Walter Raleigh, which once stood guard outside a southern tobacco shop, a reminder of the Elizabethan courtier whose influence contributed greatly to the spread of tobacco smoking throughout the world.

CONSUMER STAKES IN SMOKE*

Behind the smoke from cigarettes, cigars, and pipes are more than 400,000 growers, uncounted millions of consumers, and a handful of major corporations. Federal Trade Commission experts have been analyzing this great industry and now give to consumers for the first time comprehensive data on the spread between farm and consumer prices in their report which Congress ordered in 1935

PRESS a button on a cigarette case and a single cigarette pops out; a button, a catch, and a spring do the trick. A far more impressive performance is the delivery in 1 year of more than 150 billion cigarettes, 37 million pounds of snuff, and 4½ billion cigars.

More than a button, a spring, a catch, and a gadget are required to move this vast quantity of tobacco from growers to users. It takes 422 thousand farmers to produce all tobacco grown in the United States. It takes 87 thousand persons to process that part of domestically used portion of the more than 1 billion pounds of tobacco raised on 1½ million acres. Fifteen and a half thousand persons are engaged in the wholesale distribution of tobacco. In 1929 more than 33 thousand tobacco stores supplying tobacco users with tobacco dotted the streets of American cities. In addition, hundreds of thousands of drug stores, grocery stores, depots, department stores act as dispensers of these important consumer goods. In fact, almost every economic facility in the country devotes some of its time to tobacco. As much as 20 percent of all the money paid to the Federal Treasury in a year has come from excise taxes on tobacco. The tobacco industry is no pipe dream. The value of its products at the factory ranked seventh among all industries in 1930. Smoke realities today are major economic realities.

Twenty-six major types of tobacco are raised in the United States, each type the distinctive product of a particular region. To tobacco experts Virginia sun-cured tobacco is as different from burley as horses from apples. Tobacco derives its distinctive characteristics from its environment, soil, climate, and method of cultivation. Dark fire-cured tobaccos, used chiefly in snuff, are grown in Virginia, Tennessee, and southern Kentucky. The Maryland variety, distinguished for its even burn, is mixed with other tobacco for use in cigarettes. Most important cigarette tobacco is the bright-yellow leaf tobacco, known as flue-cured, grown in Virginia, Georgia, and North and South Carolina. Cream-colored burley tobacco is grown in Kentucky and nearby States. Light in color and mild in taste, it, too, is an important ingredient of many cigarettes. Cigar tobacco comes from Pennsylvania, Ohio, Connecticut, Massachusetts, Wisconsin, and Minnesota.

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*This is the second of a series of articles based on the Federal Trade Commission's inquiry into agricultural income. First of the series appeared in our May 17 issue.

Producing tobacco is a back-breaking, highly technical, and expensive task. The plant is delicate and fragile, susceptible to many diseases, and good tobacco is the result of unceasing attention by the grower. Tobacco growing begins in the early spring with the preparation of the seed beds. Seed beds are sterilized either by burning over or with steam, and generally are fertilized. Seeds are planted early in the spring under protective covers of a kind of cheese cloth. In late spring the plants are transplanted to fields, where the tobacco is encouraged to grow as rapidly as possible. During the growing period the tobacco requires constant cultivation; tops are removed to prevent the growth of seeds, "suckers" are pulled off to conserve the plant's strength. Good tobacco comes from plants bearing from 10 to 20 leaves.

Tobacco is harvested by plucking the leaves off the plant as they ripen or by cutting down the entire plant. After harvesting, the tobacco is taken to barns, where it is hung up for curing.

Three methods are used in curing tobacco: Air-curing, a method by which no artificial heat is used; flue-curing, by which the tobacco is cured with artificial heat but without smoke; and fire-curing, which is accomplished by heat and smoke. These methods are used for different kinds of tobacco. Air-cured tobacco, for instance, first becomes a deep yellow and then turns a reddish brown. Flue-cured is not permitted to turn brown at all, while fire-cured tobacco is often turned by an intense heat to a black or dark-green color.

After curing, the tobacco generally is packed into bulks where it is stored until marketing time. At the end of this period the bulks are pulled open and the tobacco is sorted into grades. Each grade is then tied into hands, or bunches, ready for marketing.

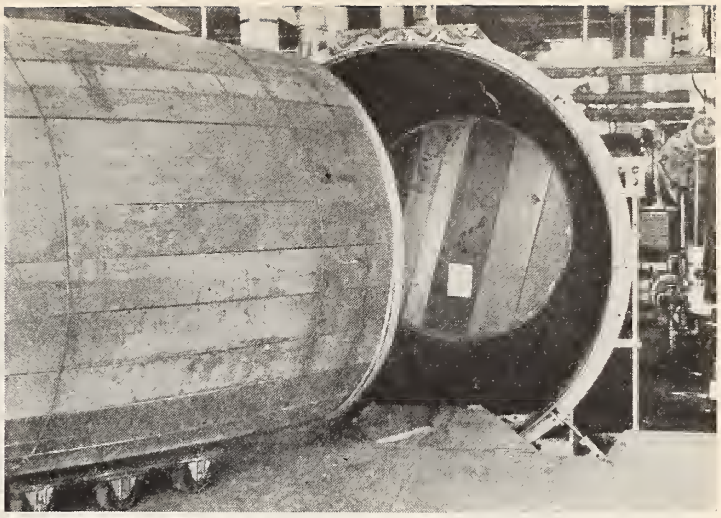
All of a year of back-breaking manual labor goes into the growing of tobacco for the market. At the end of this time the farmer sells his crop either at auction or on his farm to tobacco buyers who visit him. The tobacco is usually bought by manufacturers' agents or by middlemen who resell the product. Six percent of the tobacco produced in the United States is marketed through farmers' cooperatives.

Each buyer for the big processing companies buys for his own purposes according to his own system of grading. Although quality standards for tobacco set by the Federal Government are available, their use is not widespread. Because of this tobacco farmers sometimes receive less than they would receive if tobacco were sold by Government grades. Sharp-eyed speculators sometimes purchase badly assorted tobacco at less than its full market price, reassort it, and resell it the following day for a quick profit.

Preparing the soil, nurturing the young plants, transplanting, cultivating, harvesting, and curing tobacco—all these necessary tasks are costly, skilled, and tedious.

A crop which took a year to produce for market is gone in a few seconds at the auction where most of the tobacco which farmers raise for market is sold.

Tobacco for cigarettes, redried after its purchase, ages about 2 years in these hogsheads before it is processed.



At the end of the aging period, the hogsheads are wheeled into this machine where all air is pumped out.

Stripped of its giant containers, the compact and tightly packed mounds of tobacco must be pulled apart.

A mixture of various types of leaves, according to formula, is placed in cages and carried through a steam bath.

Stems must be separated from the moistened leaves. In some factories this is done by machine, in others by hand.

Stemmed, the leaves next are flavored by spraying, passed through the cutting machine, and conveyed to the final process.

Shredded, flavored, and cleansed, the tobacco is ready now to be fed onto endless strips of white paper.

Long, white, tobacco-filled tubes are cut into cigarette sizes, weighed, inspected, and assembled for packaging.

Tobacco is processed into snuff by pulverizing; into smoking tobacco by shredding or granulating; and into plug chewing tobacco by compressing. Methods of manufacture of these types have changed little since Sir Walter Raleigh "tooke a pipe of tobacco a little before he went to the scaffolde." Since that time, however, cigarettes have become by far the most important tobacco product. About 48 percent of the 775 million pounds of tobacco processed in the United States in 1933 went into making cigarettes. Sixty percent of the manufactured value of tobacco products, totaling 909 million dollars, represented the value of cigarettes.

Cigarette tobacco is aged approximately 2 years. At the end of the aging period the hogsheads in which the tobacco was stored are pulled apart. The tobacco is placed in a cage which carries the leaves through a steam bath to make them moist and pliable and then to a stemming machine which separates the leaves from the stems. From there the tobacco goes to blending tables, where many varieties of tobacco are blended together in proportions to fit smokers' tastes. Leaves then pass through a cutter which slices them to shreds, and to vast drums where the tobacco is sprayed with flavoring solutions.

After a 2-day rest the tobacco resumes its trip through the factory, first through screens and magnets to remove foreign substances, then onto an endless strip of white paper where it is rolled into cigarettes, pasted, cut into cigarette sizes, piled into a weighing machine, packed, stamped with Federal Revenue stamp, and assembled into cartons. After the factory, cigarette history is much like that of any other commodity. The goods go to wholesalers, to chain stores, to retailers, and eventually over counters to consumers.

Tobacco distribution charted would look like an hourglass. The raw material originates on a vast number of small farms, goes to a much smaller number of tobacco middlemen, and then, passing through the thin neck of the hourglass, through the hands of a very few processors, and out again to wholesalers, to retailers, and finally to its millions of consumers.

To this tobacco hourglass the Federal Trade Commission has devoted most of its study. Technically and mechanically, tobacco presents no problem that engineers and technicians cannot overcome, but economically grave problems have arisen in the tobacco industry. These problems are not peculiar to tobacco alone. They are part of the great problem of distribution, how to get products from the farmer to the consumer, how to get a fair price to the farmer for his work, how to get a fair wage to the workers in industry, and how to get the products of farm and factory distributed at a reasonable cost to consumers.

Failure to solve this problem is reflected in the income of farmers and processors. Both the manufactured value of tobacco products made in this country and the income of the growers of tobacco suffered during depression years, but they suffered unequally. Manufactured value dropped from $1,246,000,000 in 1929 to $1,155,000,000 in 1931 and $909,000,000 in 1933. Compare now the serious collapse in income of tobacco growers, starting at $282,000,000 in 1929, falling off to $130,000,000 in 1931, and reaching its bottom level of $108,000,000 in 1932—a shrinkage of 62 percent from the 1929 level.

Correcting the unbalance which depression brought to tobacco farmers' share in consumers' dollars was Agriculture's adjustment program, not reported on by the Federal Trade

Commission. Already in 1933 the income of these farmers reflected the gains brought by adjustment, inaugurated that year by AAA, first through marketing agreements and later through production control. That year it was $70,000.000 greater than in the lowest of the depression years, 1932. Further gains to $225,000,000 came in 1934, and close to $237,000,000 in 1935. In addition to this income from sales, tobacco farmers who cooperated in the AAA program received benefit payments which in 1933 totaled $16,000,000; in 1934, $31,000,000; and in 1935, $13,000,000.

In 1931, when tobacco on the farm was selling at its lowest price in many years, processors advanced the price of cigarettes. Though fewer cigarettes were sold, processors made more profit per cigarette sold. Net income of the three largest tobacco manufacturers in the United States was $95,000,000 in 1929, $109,000,000 in 1930, $119.000,000 in 1931, $112,000,000 in 1932, and $52,000,000 in 1933. Net income of 14 tobacco manufacturers, likewise, increased during the early depression years, from $113,000,000 in 1929 to $132,000,000 in 1930, to $140,000,000 in 1931. The drop started in 1932 when their income was $136,000,000, then $69,000,000 in 1933. Profits in the years following 1932 were affected by AAA processing taxes. Proceeds of these taxes went to farmers and helped to increase their income directly as well as to finance the program of tobacco production adjustment. These devices—processing taxes and production adjustment program—served to correct the unbalance between growers and manufacturers of tobacco.

Throughout the depression, from 1929 through 1934, the average yearly rate of return on the investment used in tobacco processing by the 14 largest companies was 16 percent. In the least profitable year, 1933, it averaged 10 percent of the investment in the business. During this period tobacco farmers are estimated to have suffered serious losses; two large tobacco chain stores had an average net loss of 1.37 percent on the capital invested in their business, and tobacco wholesalers and jobbers received 4.4 percent on their business investment.

In seeking out reasons why these profits occur along with competition, the Commission investigated the control that each economic group in the tobacco industry exercised over the whole tobacco economy.

Simple numbers tell the story. Over 400,000 farmers produce all tobacco grown in this country. Of the 1934 crop, 13 tobacco manufacturers purchased 64 percent; 3 manufacturers purchased 46 percent; and 1 purchased 22 percent. Since 40 percent of the crop is exported, it is plain that 13 tobacco manufacturers dominate the purchase for domestic use of the harvests of 400,000 farmers. On the other hand, retail and wholesale distribution is almost as widely diffused as the production of tobacco. The six largest grocery chains sold only 8 percent, and the six drug and tobacco chains sold only 5 percent, of all cigarettes sold in the United States. At the neck of the tobacco hourglass 13 manufacturers have a tight grip on production and sales of practically all tobacco sold.

Concentration is even more startling when the record of specific tobacco products is examined. In 1934, three cigarette companies manufactured 80 percent of all United States cigarettes; three smoking-tobacco companies produced 65 percent of the smoking tobacco; three chewing-

Packaged, Revenue-stamped, and finally cartoned, the cigarettes are ready now to move on to consumer markets.

Not only farmers' and consumers' but workers' stakes are large in the tobacco industry which employs 87,000 workers.

tobacco manufacturers produced 69 percent of the chewing tobacco; and three snuff companies produced 95 percent of the snuff produced.

Cigars, unlike other tobacco products, are produced by a great number of separate companies, but there is evidence also of an increasing concentration in cigar manufacture. The number of cigar factories declined from 17,000 in 1914 to 5,000 in 1934, while the average production per factory increased from 419,000 to 830,000 per factory.

No evidence of collusion in the control of prices was spotted in any of the branches of the tobacco industry, except snuff, by the Federal Trade Commission. Prices of the most popular cigarettes, the Federal Trade Commission discovered, usually moved up or down together. When any one of the big three companies changed the price of its cigarettes the other companies fell in line within a few hours. The history of wholesale cigarette prices in recent years tells its own story.

Chief price competition which the largest three manufacturers have faced in recent years has been from the 10-cent package of cigarettes. When, in spite of declining prices which farmers received for tobacco, processors advanced the price of cigarettes in 1931 from $6.40 to $6.85 per thousand, several other companies, taking advantage of low leaf prices, began the manufacture and sale of cigarettes at 10 cents per package. For a while the 10-cent cigarette cut deeply into the sales of the three largest tobacco companies. To meet this new competition the tobacco companies cut the price of their products first to $6 then to $5.50 in February 1933. In January 1934 prices were raised again to $6.10 per thousand. By 1936, 10-cent cigarettes were in a weak position in relative volume of sales.

No illegal monopoly was discovered in the tobacco industry by the Federal Trade Commission. However, the Commission says, "The aggregate business of the Four Companies, particularly in cigarettes, is of monopolistic proportions, but since they operate separately they do not, in a legal contemplation, constitute a monopoly." Forcefully the Commission points out the relationship between the size of the companies and their economic position: "Since the dissolution decree of 1911, substantially the same companies have continued to dominate the tobacco industry. This fact might lead to the thought that cooperative activity among large manufacturers exists to a marked degree. The information developed, however, indicates that there are several economic factors which enable the large companies to maintain their positions and which make the growth of other companies difficult. These include the heavy financing required to carry the inventories of leaf tobacco necessary for volume production, and the internal revenue taxes which must be paid by manufacturers before the merchandise is sold; the elaborate and expensive storage and manufacturing facilities necessary; and the cost of advertising and promotive work which must be done to establish brands on a volume basis—the only basis which permits efficient and economical production and distribution. It is apparent from these factors that the continued domination of the industry by relatively few large companies is not necessarily the result of collusion among them."

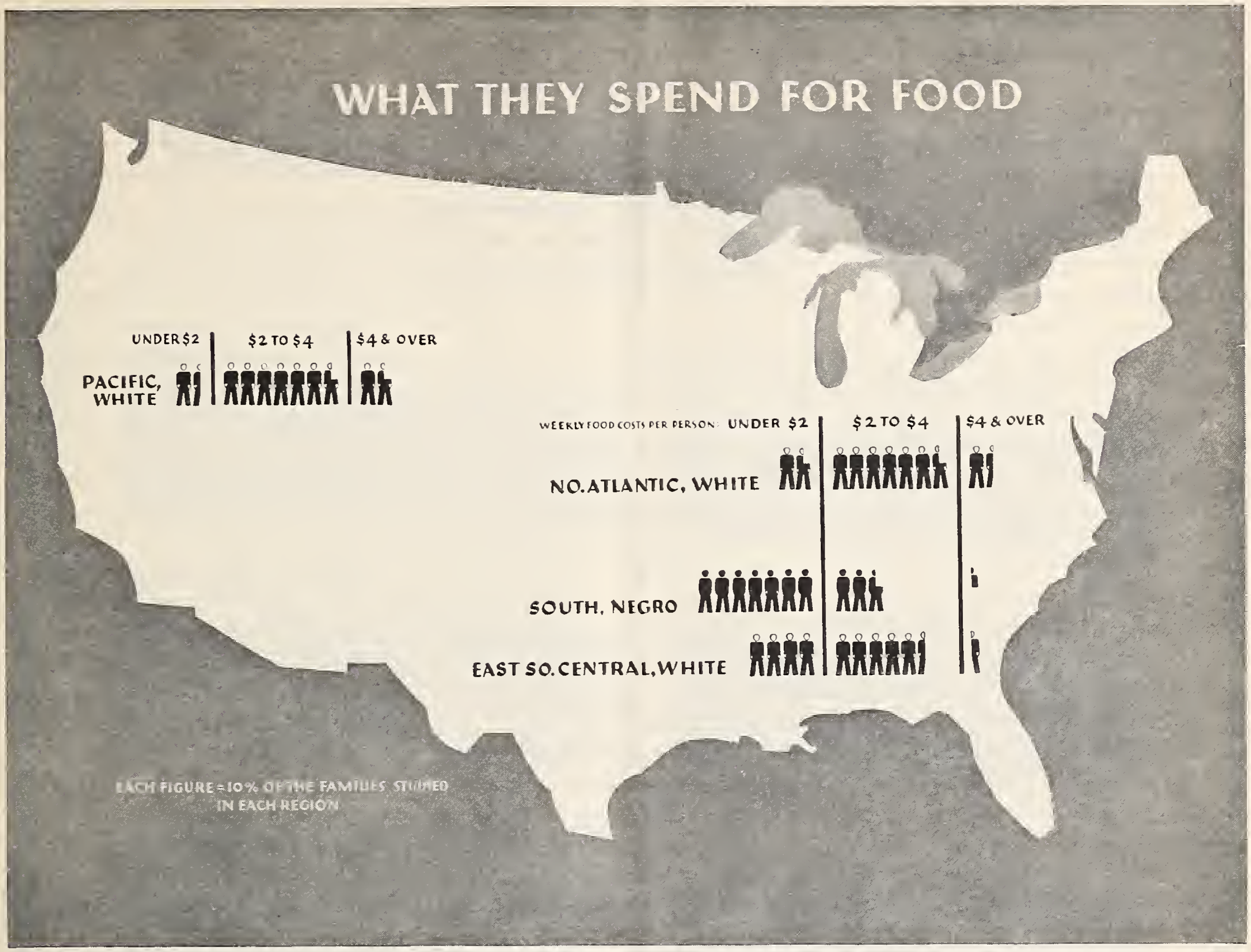
High profits, such as those in the tobacco industry, the Federal Trade Commission points out, would ordinarily attract competitors. Competition then would force profits down, prices would be lowered, profit margins reduced, until in the end the returns in the tobacco industry would be no greater than those in any other industry. Although the Federal Trade Commission has discovered no monopoly, it is significant that this normal competitive sequence has not happened in tobacco.

There was a time when the United States Supreme Court declared the American Tobacco Co. to be an illegal monopoly and ordered the trust dissolved. At the time of this decree in 1911 the tobacco trust controlled the entire tobacco industry except for the manufacture of cigars. It owned tinfoil factories, factories manufacturing tin and wooden containers, and the only very large tobacco store chain in the country. It advanced to capture control in a new section of the tobacco industry by first purchasing one company and then using monopoly profits from its other activities to finance a price war against competitors. Competitors were either forced to sell out or be driven into bankruptcy. By this technique the American Tobacco Co. had gained monopoly control of practically the entire tobacco industry at the time of its dissolution.

Fragments of the old empire, however, survived as dominating companies in certain trade areas and commodities. For instance, today the three largest snuff companies, offspring of the old trust, divide the United States among themselves, each one supplying a particular part of the country. The sale of cigarettes by nationally advertised brands transformed the tobacco industry from a group of dominant regional companies into a few large national competitors.

Rapidity with which cigarettes have become a major economic factor may be gathered from a few statistics. For the last 4 years cigarette consumption has increased 12 billion each year. From 1920 to 1930 cigarette consumption increased 7.5 billion cigarettes a year. Only 8.5 billion cigarettes were smoked in the United States in 1910; in 1936 con-

[Concluded on page 22]



FOOD PATTERNS

More explorations into food-buying habits of workers in North, West, and South, throw the spotlight on the human erosion that grows out of low incomes and the handicaps such incomes impose

Four hundred years—your lifetime, your father's, and 14 generations behind him—is the span which nature needs to build just one inch of life-giving topsoil. Most of our foods and much of our clothing come from this top layer of earth, only 7 or 8 inches deep, covering the farms of our country. Loss of one inch can cut a deep slice off our soil wealth, make the production of food and clothing a more expensive thing, bring failure and want to the farmer. Yet one night's rain can—if uncontrolled—wash off an inch of soil which nature has taken 400 years to process for healthy plant growth, carry it away, and deposit it where no farmer can use it again.

Farmers know the tragedy of soil erosion. They know its waste, its costliness. They are learning how to control it. One special branch of the Government—the Soil Conservation Service—is devoted to showing them how. Another—the Agricultural Adjustment Administration—is devoted to encouraging them through large funds appropriated by Congress to put into effect better farming practices that will slow down this and other types of needless soil wastes.

Equally serious is another kind of erosion—the human kind—that goes on year after year. It's easy to see with the naked eye rains washing away rich earth from the hillsides. We rush to stop their damage. Not so easy to see is what causes the stunted bodies, dull eyes, bad teeth, crooked bones, hollow chests, sluggish bodies and spirits. But each year science is bringing to light more facts that point to the causes of these human wastes. Each year we learn more about how they can be stopped, if we want them stopped.

Lack of good food, the scientists say, is one of the most important causes of this human erosion. Fine plants cannot grow from thin soil that has lost its nutrients. Strong bodies, joyous spirits, wise minds have difficulty in growing from food which lacks the stuff that makes for health. Not all the facts that we need to know about the qualities of food have been uncovered, but enough is known to arrive at a workable pattern for good nutrition.

Now the scientists are at work measuring this pattern of good nutrition against the actual diets which people are getting. No idle research is this. Out of it will come not merely a picture of how serious is the human erosion that is going on day by day, but a measure of our unsatisfied needs for different types of food, for incomes that will make possible the purchase of such foods, for knowledge of good nutrition and the best ways of selecting and utilizing foods, and a road map for agriculture in its planning for the future.

At the center of this important research is the Bureau of Home Economics, experts in the things that go to make up a good diet. Utilizing data collected by the Bureau of Labor Statistics on the actual purchases of food made by families of wage earners and low-salaried clerical workers living in different sections of the country, this Bureau has completed an estimate of the kind of diets many of these people are now getting and how near to or far from the mark of a safe level they come.

Last September (see Sept. 21, 1936, issue) we reported on the winter diets of such families in the North Atlantic area. The data we give here cover the yearly diets of white families in that area, and of similar families in the Pacific States, and in the East South Central region. In addition are facts on the diets of negro families in the South.

First limitation to mark well is that the facts reported here refer to diets of people with fairly steady incomes. Only families boasting one or more wage earners working a minimum of 1,008 hours in at least 36 weeks of the year, or one or more clerical workers earning not over $2,000 a year, are included. Below such income groups are many who are entirely unemployed or working a more limited period and whose food expenditures necessarily suffer greater limitations. Above them are people whose more ample incomes would naturally provide for better living. Expenditures for food by the people covered in the present study ranged from less than $1 per person per week to more than $6.

Size of income alone, obviously, does not determine how much money the family shall have to spend on food. How many mouths there are to feed must be balanced in. Furthermore, one member of a family may need more food or a different assortment of foods than another. Small children need more milk than grown-ups. Grown-ups need more meat than children. A construction worker, pulling or lifting heavy weights all day, needs more carbohydrates or fats than a desk worker. A nursing mother should have more milk than a stenographer. Such differences in age, sex, activities, must be carefully recorded so that in the final picture comparisons can be accurately and fairly made.

To make diet needs and habits comparable they have to be translated into a common unit. This the Bureau did by totaling up the nutritional needs of a moderately active man. Let the sum of these requirements, they said, represent one "nutrition-requirement unit." Nutritional needs of everyone else were then measured in terms of several such "requirement units." Thus a family of five people might be a family of 4.2 so far as protein "requirements" go. Comparing one family with another by comparing its "nutrition requirement" then made possible an accurate measure of the relative nutritional needs and consumption habits of different families.

No guesswork was allowed to creep into the record of food purchases by all the hundreds of families studied. Each of the families was visited by a trained agent of the Bureau of Labor Statistics. Before records were started, the agent helped the food buyer of the family to check over supplies already on the kitchen shelves, in pantries and cellars, and to mark these down in a special inventory. Records of every kind of food brought into the house were then kept for a whole week in each of the four seasons of the year. The agent checked with the food buyer every day to be sure the proper entries had been made. At the end of each week, an inventory of supplies on hand was made again, and differences between the two inventories added or subtracted from the food purchase record.

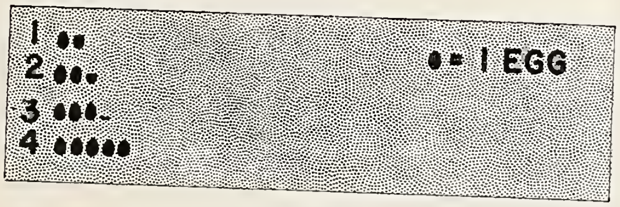
Every ounce of meat, every drop of milk, each egg and bean purchased must serve its nutritional purpose if purchases of food are to represent actual consumption. Wastes in preparing food in the kitchen and its consumption by the family are difficult to measure. These can be sizeable and have importance in any picture of actual consumption. In the main, however, they do not figure large in families, such as are covered in this story, who are forced to make every penny count and turn every ounce of their food purchases into strength and energy for daily work and living.

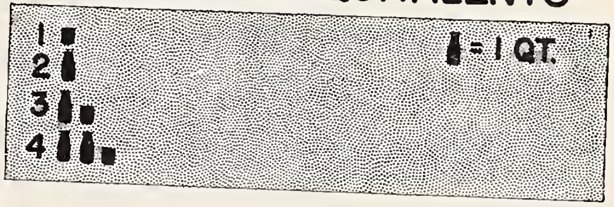
Now to the results. Food costs throughout this article refer to conditions in 1935 when prices were

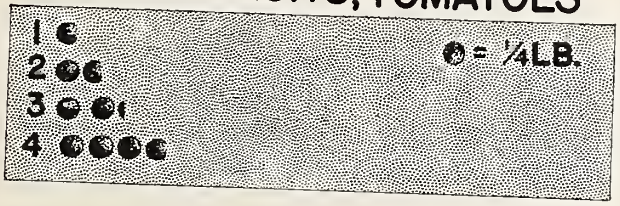
NEGRO

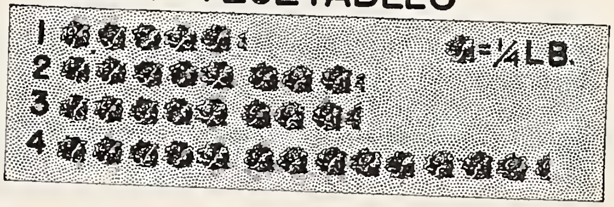
Quantities of some foods increase more than others as food budgets step up. These were the amounts of various kinds of food consumed weekly by each person in the North Atlantic workers' families when food expenditures in 1935 averaged per person:

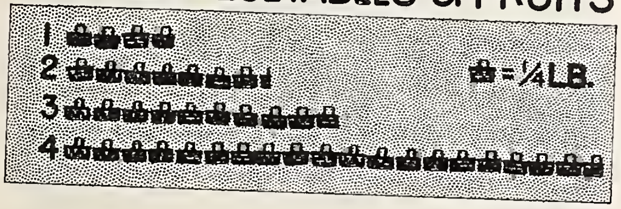
1. . . . . $1.00
2. . . . . $1.50
3. . . . . $2.10
4. . . . . $2.80

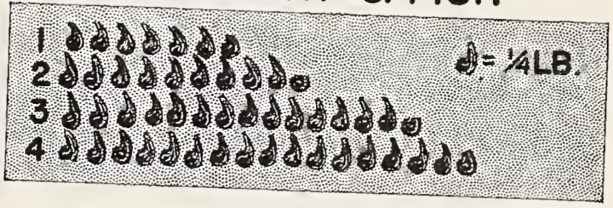

EGGS

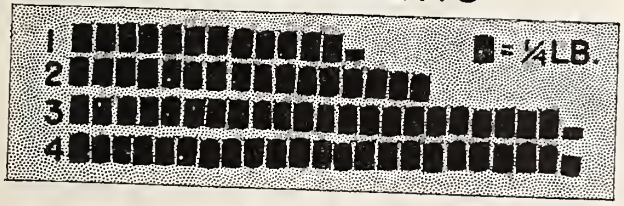

MILK & MILK EQUIVALENTS

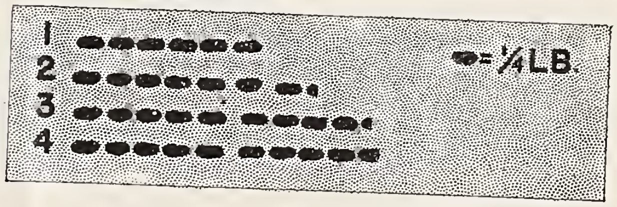

CITRUS FRUITS, TOMATOES

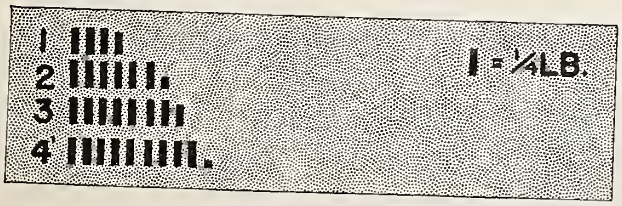

LEAFY VEGETABLES

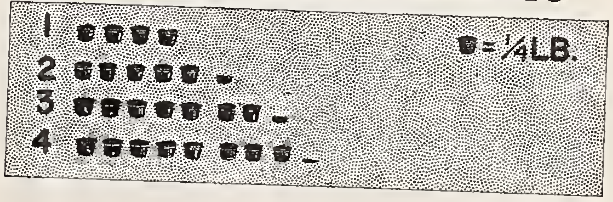

OTHER VEGETABLES & FRUITS


MEAT, POULTRY & FISH


FLOUR EQUIVALENTS


POTATOES


FATS


SUGAR, SIRUPS & JELLIES

about 5 percent lower than they are now. Incomes in general have gone up in the interval, too, but how much in the case of these families there is no precise record.

Question mark No. 1 to the researchers in this field is: Does the human erosion that comes from poor diets spring from too little money or from not knowing what and how to buy, and how to plan for a balanced diet? Facts on expenditures take first importance in answering such a question.

Wide differences show up in the money going for food in different sections of the country. Seventeen percent of the families studied in the North, 15 percent of those in the far West, the record shows, spent less than $2 a week for each person; that is, less than 9½ cents a meal for a moderately active man. Against the relatively few living at this low level in northern and western cities, high percentages were found in the South. Over a third (41 percent) of southern white wage-earner families, and more than two-thirds (70 percent) of the negro families lived on food that cost, per person, less than these 9½ cents.

Sums as small as this put harsh limits on the amount and quality of nourishment that is possible and a severe burden on the ingenuity of the family buyer. Actual records show just how the food buyers of the families spread their pennies over the weekly food purchases. Consider the northern white family spending from $1.25 to $1.87 per person, or an average of $1.60, per week. Spread over 21 meals a week, this means 7.6 cents a meal. Each person in this family got 3 eggs or less a week. His quota of milk, in one form or another, was 2.4 quarts; fats, as butter, lard, bacon, and such, less than two-thirds pound; meat, poultry, and fish, about 1.7 pounds; sugar, sirups, jellies, just under 1 pound. Tomatoes and citrus fruits—Vitamin C headliners—came to about two-thirds pound; leafy, green, and yellow vegetables, slightly under 1 pound; other vegetables and fruits came to 1¼ pounds. Tops on the diet, in quantity, were the starchy foods; flour equivalents, slightly less than 3 pounds; potatoes slightly over 2½ pounds.

Good diets, to the experts in human erosion, are not rated by their dollars, but dollars help greatly in achieving such diets. Eating at the Ritz can, though it is less likely to do so, result in as poor a diet as eating at a hot-dog stand. A wise buyer can achieve a top quality diet at a fraction of the cost of a carelessly selected meal, but the odds are heavy against it. Ingenuity and knowledge of good nutrition standards must work overtime when food money is scarce, if serious deficiencies in diet are not to show up in puny bodies. One of the valuable results of the present study is the light thrown on the importance of income and wise selection.

Examine into the quality of the diets of these workers in the North Atlantic area. Grade A diet the nutritionists define in terms of its minerals, protein, calories, vitamins. It is one that does not just meet minimum requirements of the body but provides in addition a generous margin of safety that will take care of special strains. Diets of only 2 out of every 100 workers in the group spending about $1.60 for each person a week measured up to the Grade A level. Thirty-seven out of every 100 reached the Grade B level, which has a lesser "margin of safety" in one or more of the important nutritional ingredients. Almost two-thirds (61 percent) were way down on the list as Grade C diets because they lacked even the "average minimum requirement" for one or more of the items which are an insurance against erosion. Sooner or later, if these practices continue, more than 6 out of every 10 of these people are going to have to pay for their diet deficiencies.

A slightly better proportion of diets in Pacific area cities among the workers whose food expenditures were on the same expenditure level measured up to Grade A standards. Against the 2 in every 100 in North Atlantic cities which were Grade A, there were 10 in the far West. Thirty-three reached Grade B and 57 were no higher than Grade C. Much the same distribution showed up in the same expenditure groups among white workers' families in the East South Central area and Southern Negro workers.

Now to the top of the list. Here are families which could afford $4 or more for the food for each person each week, a matter of 19 cents a meal. The map on page 9 shows the relative number who were lucky enough to have this much to spend for food.

Everyone in the family gets a very different diet on this higher expenditure level. In the North Atlantic group spending $4 per person, the weekly bill of fare for one person runs like this: 8.2 eggs; 4.1 quarts of milk; about 1 pound of fats; 4¼ pounds of meat, fish, or poultry; 1.6 pounds of sugar, jellies, sirups, etc.; about 3.8 pounds of flour equivalents; almost 3½ pounds of potatoes; about ½ pound of dried fruits or vegetables; almost 2½ pounds of tomatoes or citrus fruits; an even 2½ pounds of leafy green or yellow vegetables; and 4½ pounds of other fruits and vegetables.

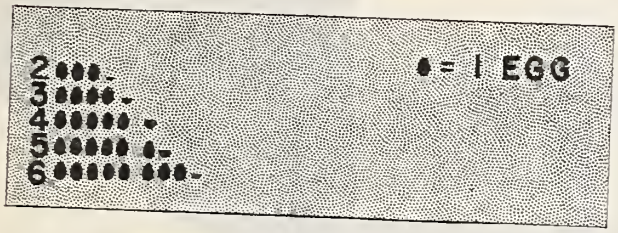
All down the list, it is the *protective* foods that loom larger in the diet than when food money is limited to the lower level of $1.60. Eggs more than doubled; milk equivalents nearly doubled; fruits and vegetables

WHITE

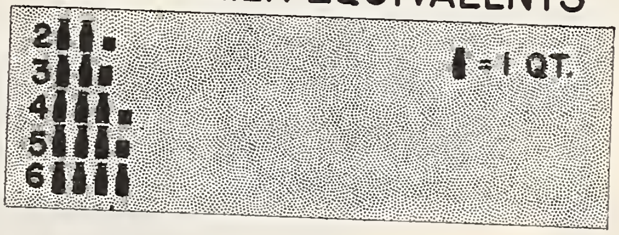
Quantities of some foods increase more than others as food budgets step up. These were the amounts of various kinds of food consumed weekly by each person in the North Atlantic workers' families when food expenditures in 1935 averaged per person:

2.	$1.60
3.	$2.20
4.	$2.67
5.	$3.40
6.	$4.00

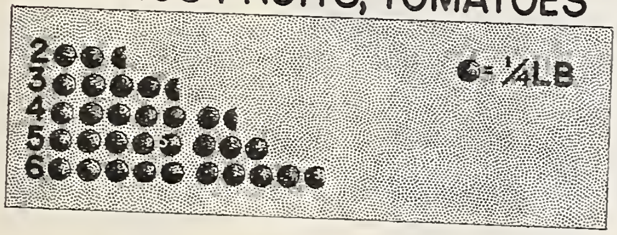
EGGS



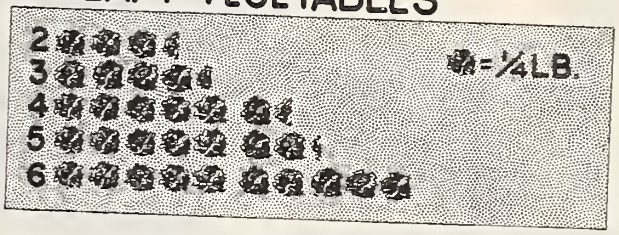
MILK & MILK EQUIVALENTS



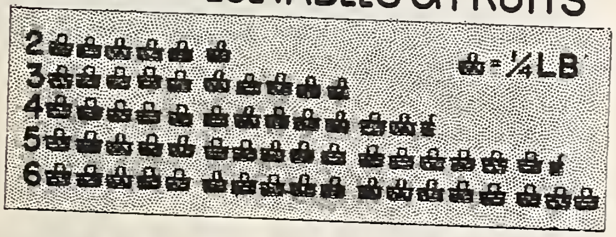
CITRUS FRUITS, TOMATOES



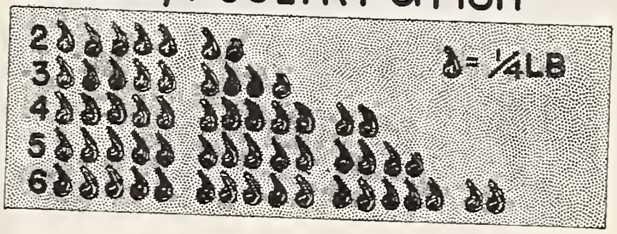
LEAFY VEGETABLES



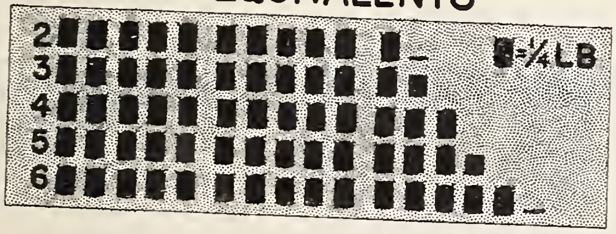
OTHER VEGETABLES & FRUITS



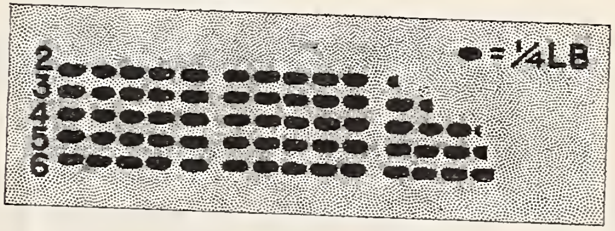
MEAT, POULTRY & FISH



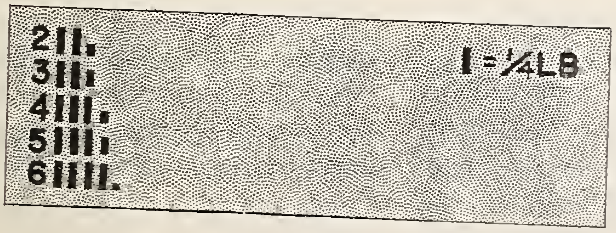
FLOUR EQUIVALENTS



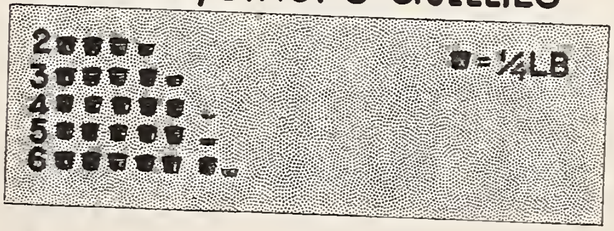
POTATOES



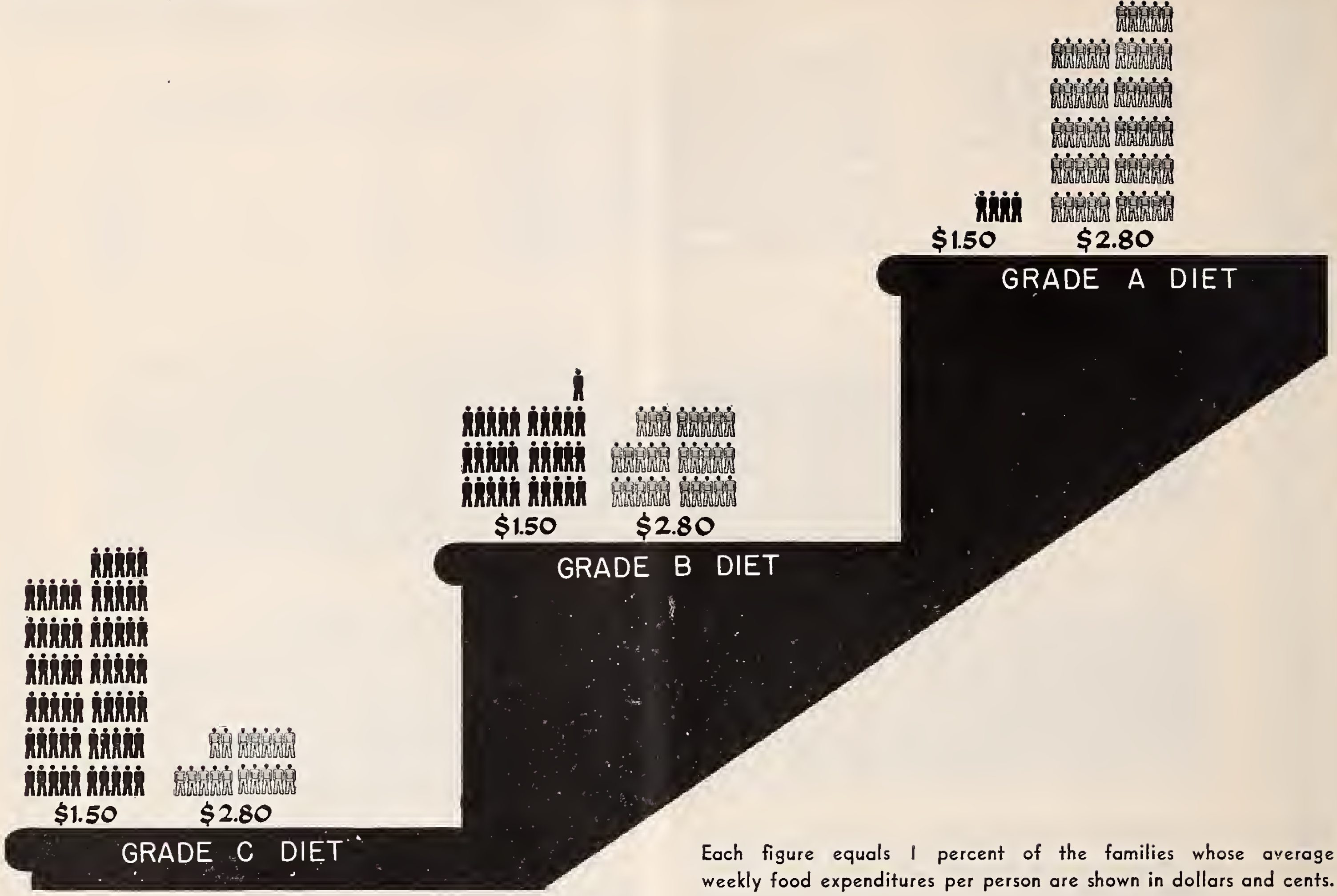
FATS



SUGAR, SIRUPS & JELLIES



SOUTH (NEGRO)



Each figure equals 1 percent of the families whose average weekly food expenditures per person are shown in dollars and cents.

HUMAN EROSION

Most Workers Achieve Grade A Only With Larger Food Budgets;

were triple the amount in the higher than in the lower expenditure level. Other types of food increased in amount, too, but in most instances not in such marked amounts.

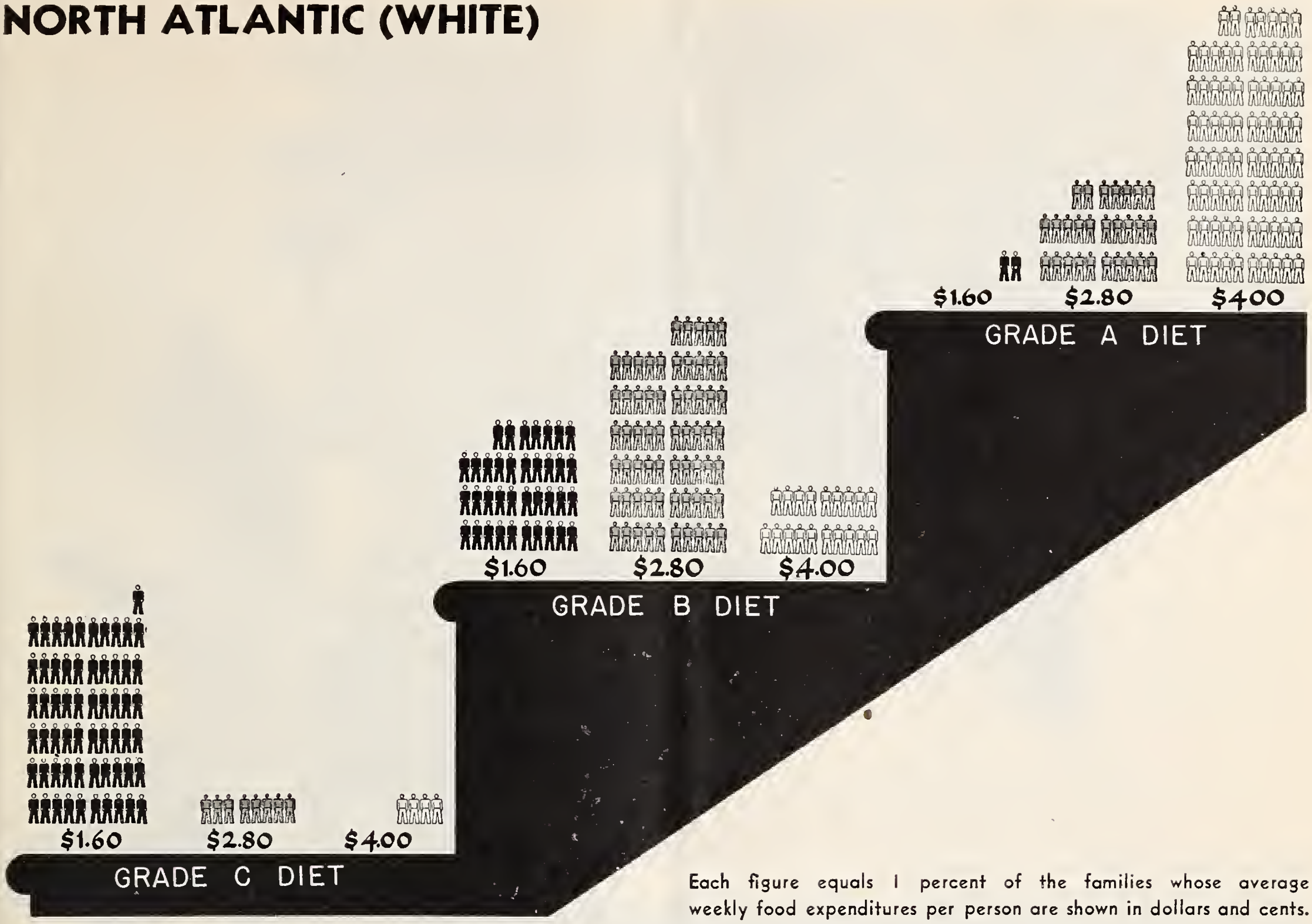
Larger quantities, more of the protective foods, and better quality, make attaining a Grade A quality diet that much easier. Seventy-seven out of every 100 spending weekly $4 a person in the North Atlantic area achieved this Grade A diet; 19 reached the Grade B level; and only 4 were left on the Grade C level—against 61 out of every 100 on this level in the $1.60 group.

Pacific area families showed an even better record. Not one of the diets on the $4 level fell in the Grade C class; 78 out of 100 reached Grade A; 22 were Grade B.

Part, if not all, of the reason for this better record lay in the differences in the cost of fruits, vegetables, and meats. The first two come cheaper on the Pacific Coast than in the East. Meats are slightly cheaper in North Atlantic cities than in the West (the Coast). But is this true? At every level of food expense, the Bureau points out, Pacific families bought more fruits and vegetables, about the same amount of eggs and milk, but less meats, and a smaller share of their grain products in highly processed forms. Result: A diet of higher nutritive value for the money spent.

Food money—like wages—among

NORTH ATLANTIC (WHITE)



Each figure equals 1 percent of the families whose average weekly food expenditures per person are shown in dollars and cents.

SETS IN AT GRADE C

A Few, By Careful Selection, Achieve It On Reduced Budgets

southern workingmen's families, whether white or colored, does not come as high as in the North and West. Top cost level of the diets studied in this region ranged between $2.50 and $3.12 per person weekly or an average of $2.80. Just a few more than half (55 percent) of the diets of white and colored persons on this expenditure level reached the safety zone of Grade A. Among the white families 2 out of every 100 rated only Grade C, while 17 out of every 100 of the diets of the Negro families were worth only a Grade C mark.

"One or both of two conditions must be met", concludes the Bureau of Home Economics on these facts, "if higher levels of nutrition are to be attained by low-income families. Some families need more money for food. . . . Some families need to apply more effectively our present knowledge of food and nutrition to their food selection problems, and so get better diets with the money now available."

How to get those larger food budgets and that greater knowledge present urgent problems for a nation that cares as much about its human as its natural resources. Day after day, week after week, poor diets are taking their toll. It takes time to build a healthy body. It takes more time to undo the damages that come from neglect.

Buds, flowers, and fruit often put in an appearance simultaneously on one lemon tree. Because lemon trees blossom and bear fruit the year round, a single tree can produce as many as 3,000 lemons in 1 year.

ADD THE JUICE OF A LEMON

Both for flavor and Vitamin C, lemons deserve a place in the well-rounded diet, but this summer's lemonade consumers will have to pay for last winter's freezing weather

OLD-TIME medicine men were masters of ballyhoo, but they never plugged their wares half so hard as some men over the centuries have praised the lemon. Curative powers for this humble fruit, we know now, have been grossly exaggerated. Research has proved that, but it has also established the fact that lemons have rightful claims to fame. The British Parliament in the seventeenth century ordered lemon juice as a daily ration to protect sailors on long voyages from the deadly disease of scurvy, and science has since shown that the British had the right idea.

Lemons rank with other citrus fruits—fresh currants, strawberries, and raspberries—as an excellent source of Vitamin C. It is lack of Vitamin C that results in scurvy. An abundance of Vitamin C helps to keep down dentist bills.

High citric acid content, sweetened with a very small amount of natural sugar, is mainly responsible for the lemon's characteristic tart flavor. Contributing to this typical taste are the aromatic oils in the rind. These can be pressed out and used commercially in the manufacture of lemon flavoring extract—a handy product to have in the kitchen cabinet. The rind goes to candy making.

Flavor is the quality that writes the lemon on most shopping lists. In pies and candies, in custards and cakes, in punches and ices, the juice of a lemon adds the sharp tang that makes for big consumer appeal. As a thirst quencher, lemon is champion. The Army recognized this asset when, during the World War, lemon drops were rationed out when water supplies ran short.

Known among botanists as the *Citrus limenia,* the lemon is a member of the citrus family. That is, the large group that includes the orange, lime, grapefruit, tangerine, and kumquat. The lemon originally lived in northwest India, but in the early part of the Christian era started wandering. It settled in southern Europe and took root principally in the island of Sicily. This little isle at the toe of Italy's boot held first place in lemon production until the United States entered the race and swept into a big lead.

Today California is *the* lemon-growing State—with no challenger in sight. At one time Florida shipped thousands of boxes of lemons yearly, but the great freeze of 1895 killed most of the groves. Now, except for a few groves of Villafranca lemons that provide fruit for local use and some local planting of the Perrine and Meyer lemons—both of rather recent introduction—the only lemon trees in the Gulf States are grown as ornaments in dooryards. Arizona ships a few thousand boxes of lemons yearly, but she can hardly be said to offer competition to California, which has 85 percent of the lemons consumed in the United States and Canada to her credit. Italy supplies the rest.

Between them, these two regions put lemons in the diets of the world. In the peak year of 1935 California harvested approximately 10 million boxes of lemons—double her output of 10 years earlier. This bumper crop meant glutted markets, for demand lagged behind supply, and growers received only $1.47 a box for their lemons, the lowest price recorded in more than a decade. A crop of 8 million boxes in 1935 righted the lemon cart, and growers reported $2.40 as the average price received for every box. Over 90 percent of California lemons come from the southern counties of the State, where groves occupy the best citrus-growing sites—those that are most nearly frost-free. Lemons win for themselves the choicest sites by being more susceptible to injury from low temperatures than the orange or grapefruit. Northern and central California counties contribute less than 5 percent of the whole lemon harvest.

Two varieties of lemon—the Lisbon and the Eureka—comprise the commercial crop of California. The trees, pruned to stand about 15 feet high, have evergreen leaves of a deep, glossy green and rather dense foliage. The fruit of both varieties, when ready for picking, is egg-shaped with a smooth rind of deep green, abundant juice, and few seeds. Although there are variations in shape, the Eureka and Lisbon lemons are enough alike so that packers make little or no distinction between them in the sorting process.

Similar though they are, the Eureka variety is gaining an edge in popularity over the Lisbon. Partly responsible for this preference is the

At the packing house lemons are taken from storage to be sized and packed for shipment. Both processes require hand work because of the irregular shape of the fruit. Packers select by eye lemons of various sizes as they travel along a conveyer belt.

fact that the Eureka yields are greatest in the late spring and summer when lemons are most in demand. Big Lisbon season is fall and winter. However, neither type of tree ever takes a real holiday. That is why one lemon tree can produce as many as 3,000 fruit in a year, and that is why you can see the surprising spectacle of buds, flowers, and fruit growing on one tree at the same time. Thanks to these industrious habits of growth, California can ship fresh lemons to market every day in the year.

No crop receives better care than the lemon. Every tree in the best groves is of pedigreed stock, being budded from a parent which is already producing lemons of the finest quality. Oddly enough, a lemon tree begins with the planting of *orange* seed for rootstocks. Later these seedling rootstock trees are budded with the *lemon*. That is, a bud from a lemon tree is inserted in a slit made in the bark of the rootstock about 2 inches above the ground. It grows into a shoot which eventually forms the top of the tree. This bud determines the kind of fruit the tree will bear, irrespective of the kind of rootstock—thus lemons grow upon an orange rootstock.

Young trees leave the nursery for the grove about a year after budding. Then irrigation, cultivation, fertilization, pruning—all costly processes—speed the lemon to full growth. However, it isn't as easy as that. The grower must keep an eye out for insect pests and about once a year cover the trees with canvas tents preparatory to fumigating. He must invest heavily in oil heaters to protect his trees from frosts in winter. Reward for his labor comes at the end of the seventh or eighth year when the tree begins commercial bearing. From then on the life of a good tree will closely approximate the life of man.

Size, not color, determines when lemons are picked. Any lemon too large to pass through a metal ring carried by the picker is ready for picking, whether the fruit be silvery, light green, or dark green. To avoid injuring the lemon skin, pickers wear gloves, clip, never pull, the fruit from the tree.

Eggs could not be handled more gingerly than lemons in the picking and packing processes. Because rough treatment means injury to the lemon rind with subsequent loss from decay, every picker wears gloves, clips, never pulls, the fruit from the tree. Lemons are picked by size, not by state of ripeness. Each picker carries a metal ring about 2¼ inches in diameter. This he slips over the lemon. Fruit that will not pass through the ring is of a size for picking, and goes into the basket irrespective of color—it may be dark green, silvery, or tree-ripe yellow. Smaller lemons are left for the next picking crew, who will cover the grove usually about 6 weeks later.

At the packing house sorters wash the fruit, removing culls and lemonettes—small-sized lemons—and separate the rest of the picking into as many lots as there are color classifications. These are stored until the lemons have lost their green color and taken on the waxy yellow of the highest grade lemons which you see in the markets. Then they are taken from storage and graded, sized, and packed—all three processes demanding hand work because of the irregular shape of the lemon. Packed lemons are sold on the basis of size as well as grade—the principal sizes being 240's, 270's, 300's, 360's, 420's, 442's, and 490's. These represent the number of lemons in a box, such a box usually weighing 76 pounds. You'll probably leave your order at the grocery for 300's, 360's, and 420's, as most consumers prefer these medium sizes.

Consumers who want value should look for lemons that are fine-textured and heavy for their size. These will be juicier and of better quality than lemons that are coarse-skinned and light in weight. Juice content is related to thinness of rind and, to some extent, to maturity. Deep-yellow lemons may be juicier, but they aren't so desirable as the light green-yellow lemons. The latter have a high acid content, and acid is what we look for in this flavor food. Decay appears as a mold or discolored soft area at the stem end of the lemon or elsewhere. Remember that a mechanical injury to the rind makes the fruit subject to mold. Discard shriveled and hard-skinned fruits and those that are soft and spongy. In fact, you would probably not need prompting to follow this practice. In keeping lemons, try putting them in a jar of cold water. They will decay slower than they will if left in their wrappers.

Big headache of their industry—the marketing problem—many of the fruit growers have turned over to the experts of the California Fruit Growers Exchange, largest cooperative marketing organization in the country. Begun as the result of marketing difficulties with which individual citrus growers could not cope, the Exchange now markets about 95 percent of the State's lemons, has taken on such knotty problems as securing permanent water supplies for irrigation, controlling insect disease, improving methods of packing and transportation, etc. When overproduction threw citrus growers for a tremendous loss, the Exchange set to work on an advertising campaign to increase consumption. It educated the consumer in new uses for the lemon—as a tonic, an ingredient for salad dressing, a garnish for foods. The Exchange has even gone into the manufacturing business. To dispose of unmerchantable grades of fruit or surplus supplies which, if thrown on the market, would knock the bottom out of lemon prices, it set up the Exchange Lemon Products Co. This byproducts business has assumed huge proportions with its manufacture of citric acid, citrate of lime used in the printing of calico, and citrus pectin for jelly making.

Following a plan that remains almost unchanged today, groups of local growers joined together in packing associations to provide better packing methods, regulate grades, etc. These associations, in turn, banded together so that through district exchanges they could secure a higher marketing efficiency for their products than they could alone. District exchanges then consolidated in a central marketing organization, the present California Fruit Growers Exchange, so that efficiency might further be increased. The policies of the Central Exchange are controlled by the growers themselves, for the local associations have representatives on the board of directors of the district exchanges, which in turn are represented on the board of the Central Exchange. The Exchange renders all its services to the local associations of which the individual growers are members. All returns for fruit go to the growers, except for handling and selling charges.

Of interest to consumers are the Exchange's activities in seeing that all fruit shipped measures up to certain grade regulations. Thus consumers are guaranteed citrus fruit of standard size and quality. Through its highly efficient sales organization, the Exchange sees that lemons find their way to every out-of-the-way hamlet in the country the year round.

Luckily, when consumer throats are dryest, lemonades are longest. For although California ships lemons every month in the year, heaviest shipments reach the markets during the summer months. This is the time when cooling drinks of lemonade and dishes of lemon ice are in order. Consumers use three times as many lemons in the May-to-August stretch as they do from November to March, but they pay more for them, too. This is because, with lemons, demand always keeps a jump ahead of supply. About the only thing that can change winter prices is an influenza epidemic. Consumers still doctor their colds with a good old-fashioned glass of hot lemonade.

Significant fact about consumer demand for lemons is its inelasticity. Consumers don't buy more lemons when prices are low, nor do they stop buying when prices climb upward. Apparently, if you want lemon pie for dessert, you aren't going to be put off with chocolate or apple, even when these are cheaper. Of course, this firm stand is possible only because the cost of the lemon is a relatively small part of most lemon products. The slice of lemon in your tea isn't going to cut a big slice out of your budget.

Inelasticity in demand means that a shortage of lemons sends prices skyrocketing. A small surplus, with no new buyers, knocks the bottom out of the lemon market. That is why, imports and temperature remaining constant, too big crops spell ruin for growers. That is why the California Fruit Growers Exchange, by limiting shipments of lemons, has saved many growers from ruin.

What the price of lemons will be this summer only a weather prophet can predict. For prices fluctuate wildly with temperature changes. A heat wave, a mighty thirst for lemonade, and high prices go hand in hand. However, it's a pretty safe bet that consumers will pay more for a dozen lemons this summer than they did in 1936, due to last January's frost damage. Freezing weather took a heavy toll—reports indicating that production for the 1937 season will fall short of the 1936 mark by 2 million boxes. Already the consumer has felt the effects of this shortage, having paid about 3 cents more a dozen for lemons during the first 3 months of this year than he did over the same priod last year. Average price per dozen this year has been 32 cents.

Consumers have to thank a young army of women, children, Mexican laborers, college students, and fruit

[Concluded on page 22]

Your Food Supplies

Cantaloups and tomatoes occupy the spotlight in the June fruit and vegetable calendar. June also marks the opening of the season for blackberries, raspberries, apricots, peaches, and plums.

Unseasonal advances in prices of fresh fruits and vegetables were primarily responsible for the 1 percent rise in average retail food costs from April 13 to May 18. Prices of dairy products were slightly lower and eggs—normally rising in price at this time—moved down sharply during the month. But these declines were offset by the marked advance in fresh fruits and vegetables and moderate increases in meat and bread costs. This third consecutive jump in bread prices carried the price to its highest level since 1930, with the exception of December 1935, when there was a processing tax on wheat, and bread prices reached the same level as is now reported in the United States average.

Retail food costs in general have gone up almost every month since last November and are at their highest level since January 1931. Costs now are 8.3 percent higher than a year ago, but the increase is due primarily to an 18.6 percent jump in fruit and vegetable prices. The smaller advances over May 1936 in other food groups are: Eggs, 3.6 percent; cereals and bakery products, 4.9 percent; fats and oils, and dairy products, 6.4 percent; and meats, 7 percent. On May 18 the index of costs as reported by the Bureau of Labor Statistics stood at 86.5 of the 1923–25 average, compared with 62.5 on May 15, 1933, and 102.4 on May 15, 1929.

Unfavorable weather delayed maturity of vegetable crops about 2 weeks, reduced production of early varieties, and helped to raise prices. Short supplies of quality apples and California Valencia oranges boosted fruit prices. Unusually heavy production pushed down egg prices to their lowest level of the year.

Unless meat prices advance materially, there is a good possibility that food costs in general may decline slightly this summer. Fruit, vegetable, and poultry prices probably will go down, while only slight increases are in prospect for eggs and butter. No further sharp advances in bread prices are anticipated. Beef prices are the major uncertainty in meats. Lamb prices probably will go down, while hog prices most likely will move up. But the extent of the price change in each of these groups remains uncertain.

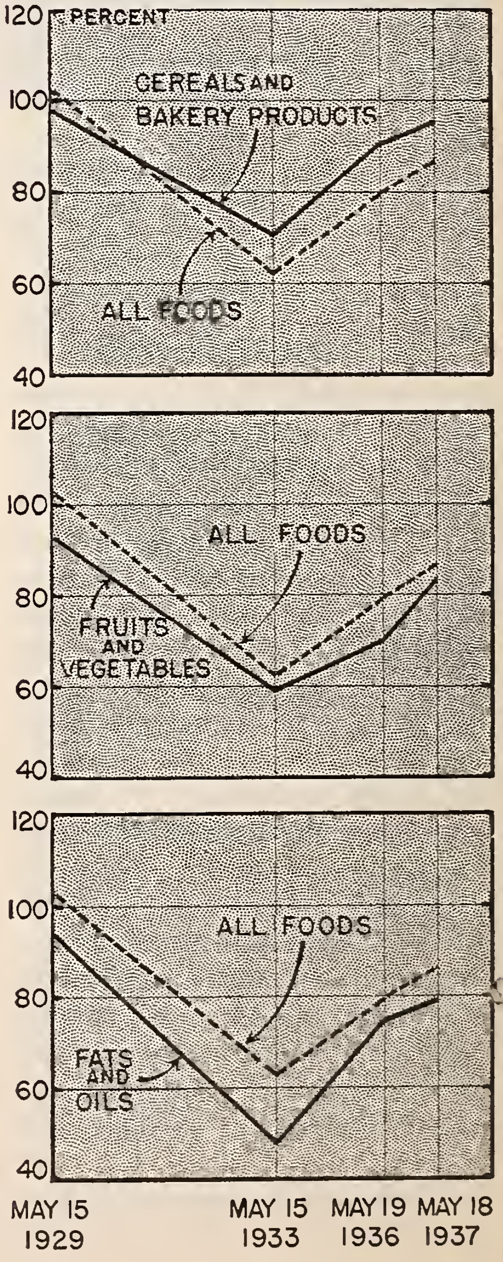
Cantaloup season swings fully under way in June. Most June melons come from California, where a crop much larger than last year is expected. Heaviest marketings from this area are due after the middle of the month. Light supplies in recent weeks have been due to late maturity of melons. Monthly increases in marketings are in prospect from now until August, when shipments usually reach their peak. The trend in prices during this period ordinarily is downward.

Tomato marketings are expected to be close to their peak this month, and prices probably will go down. Ordinarily peak movement of tomatoes occurs in June. Since vegetable crops are maturing later than usual, heaviest shipments may come in early July. Supplies this June are estimated to be slightly larger than a year ago.

Snap- and lima-bean marketings in June are expected to be larger than a year ago, but cucumber supplies probably will be slightly smaller. Cucumber marketings usually are at their peak during June. Snapbean shipments are slightly below their high point of the year. Unfavorable weather conditions, which reduced production of early maturing beans and cucumbers, were mainly responsible for recent high price levels. The outlook is for lower prices for both commodities.

New potato marketings are unusually large. Production in the States shipping this month is much heavier than a year ago and the largest on record. Heavy marketings have caused a sharp reduction in

A PERSPECTIVE OF FOOD COST CHANGES
1923~1925=100

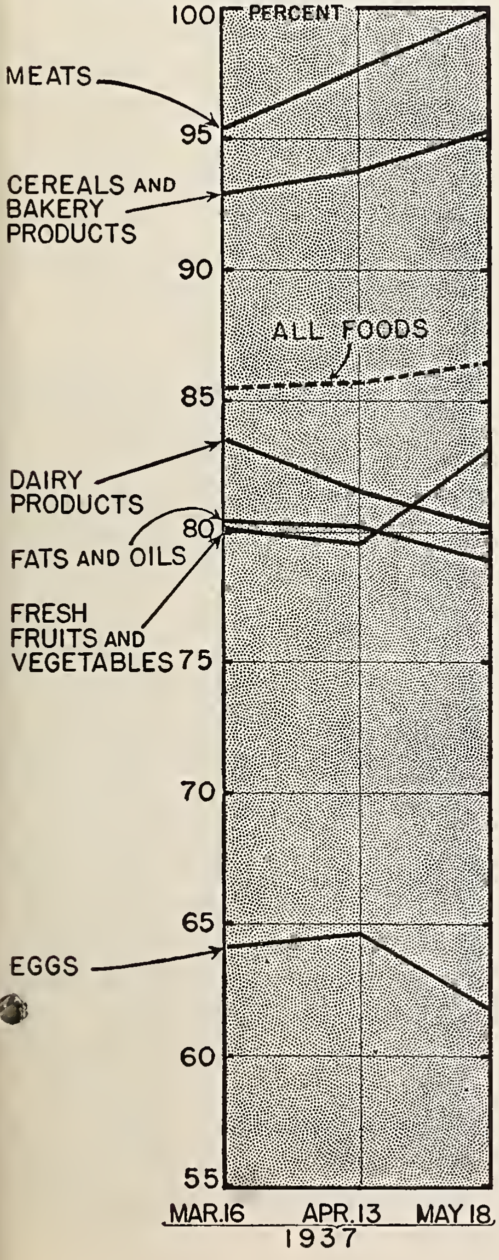


and Costs . . . .

wholesale prices, and further declines may be expected until the low point is reached in August. Heaviest shipments of new potatoes usually occur in June and July. Retail potato prices dropped another 0.1 cent per pound from April 13 to May 18 and are only slightly higher than a year ago.

Orange and lemon prices most likely will go up more than usual this summer and fall. The current lemon crop is the smallest since 1924, and relatively high prices are in prospect during the warm summer months. The Florida orange season will be over by the end of this month, leaving only California Valencias available for marketing. Production of California Valencias was reduced sharply below the 1936 level by freezes early this year. Retail orange prices went up over 1 cent a dozen while lemon prices remained unchanged from April 13 to May 18.

A CLOSE UP OF FOOD COST CHANGES
1923~1925 =100



Fresh-killed broilers and fryers are now coming to market, and a seasonal price decline is in prospect. Poultry prices ordinarily come down in the summer and fall, dropping most during the last quarter of the year. The decline this year may be smaller than usual. Retail poultry prices advanced seasonally about one-half cent a pound from April 13 to May 18. The price was only slightly higher than a year ago.

A smaller than usual advance in egg prices is expected from now until November, at which time the high point in egg prices ordinarily is reached. Due to heavy production and relatively small current consumption, considerable quantities have moved into cold storage. Heavy storage stocks have tended to cause a downward movement in prices during the past month instead of the usual rise. From April 13 to May 18 retail egg prices dropped 1.6 cents per dozen to reach their lowest level of the year. Prices, however, were about a cent a dozen higher than a year ago. Only slight advances are expected in June.

Low point in butter prices probably will be reached this month. No sharp price advances, however, are expected until September. June usually is the peak month in butter production and November the low point. Butter production this summer probably will be larger than a year ago unless drought conditions recur. Prices during the summer probably will be at about the same level as last year. While the average butter price to consumers went down 1 cent a pound from April 13 to May 18, it was 5 cents a pound above last year's level.

Hog prices advanced sharply during mid-May as a result of a marked reduction in marketings. Prices probably will continue to advance during the summer months as slaughter registers further declines. Reduction in slaughter will be offset by relatively heavy storage holdings of pork and lard so that total supplies may not be much different from a year ago.

Chops and loin roast registered the major retail pork price advances during the monthly period when they went up about 2 cents per pound. Smoked items were practically unchanged in price, while lard went down one-half cent per pound.

Lamb prices are expected to move down after the end of this month. Recent high prices have been due to a delayed movement of the spring lamb crop. If lamb prices follow their usual trend, prices will go down through October. Retail lamb prices remained practically unchanged from April 13 to May 18. This was the first period since last February in which no sharp increase has occurred. Lamb is retailing at about the same price as a year ago.

Lower grade cattle ordinarily decline in price during the summer and fall when marketings of grass-fed cattle increase seasonally. The decline this year probably will be smaller than usual because of an expected heavy demand for cattle to replace those slaughtered as a result of last year's drought.

Retail beef prices continued upward from April 13 to May 18.

Roasts went up about three-quarters of a cent per pound, while steaks were a cent per pound higher. Steaks are about 5 cents a pound higher than a year ago, while roasts are up 3.5 cents per pound.

Higher white bread prices in 28 cities caused the national average retail price to jump 0.2 cent to 8.6 cents per pound loaf from April 13 to May 18. The May 18 price equals the highest price reached during the processing tax period in December 1935. It is higher than any other price since the summer of 1930. Course of bread prices during the last half of 1937 will be influenced by the size of the wheat crop now growing. If production is as large as expected, flour and bread prices probably will move down.

CONSUMER STAKES IN SMOKE

[Concluded from page 8]

sumption had increased to more than 150 billion. The use of smoking tobacco declined from 209 million pounds in 1910 to 193 million pounds in 1934. The average yearly production of cigars from 1906 to 1910 was approximately 7 billion; by 1934 this had declined to 4½ billion. Only other tobacco product to gain from 1910 to 1934 was snuff; 31 million pounds were used in 1910, 37 million pounds in 1934.

Analysis of the price paid for a package of cigarettes in 1934 reveals that the cost of tobacco is of minor importance in the cost of a package of cigarettes. Of the average retail price of 12.82 cents per package the farmer received 1.49 cents, the processor 2.61 cents, the Government 6 cents in the form of excise taxes, and the retail and wholesale distributors 2.72 cents. These figures do not make allowances for the processing tax paid by processors or benefit payments received by farmers who cooperated in the AAA tobacco program.

The price of cigarettes has no direct relationship to the cost of the labor and tobacco that go into them. In 1931, when wages were moving downward, when tobacco prices on the farm had fallen lower than they had in years, the price of the most important brands of cigarettes was raised. Too, while the most important brands of cigarettes sold by the four largest cigarette companies retailed for the same price, no two of these tobacco companies paid the same price for its tobacco. The cost of the domestic tobacco used in the principal brands of cigarettes ranged from 20.92 cents per pound to 26.44 cents per pound in 1934.

Control of the hourglass neck of the tobacco industry by the tobacco processors perhaps permits them to dictate their own prices, but the Federal Trade Commission report makes clear the fact that the manner in which this control is used is not forbidden by existing law.

Only possibility of increased competition would come from the 10-cent cigarette. Encouragement to such competition might come, the Federal Trade Commission suggests, in changing the tax on cigarettes from one based on the number, regardless of value, to a tax on the value of cigarettes. In this way lower taxes on a 10-cent package might force down prices of major brands.

On the other hand, the Federal Trade Commission report suggests that farmers might secure more of the consumers' dollar for themselves by organizing into tobacco marketing cooperatives and by selling their tobacco by Government grades. Government grading of tobacco is one of the best assurances farmers can have that the prices they receive will reflect the quality of their products.

Central fact of the tobacco industry, then, is the concentration of economic control. A few large concerns have their hands on the neck of the bottle, and all tobacco moving from producers to consumers must pass this way. While it is true that processors have made large profits at a time when farmers' net income after costs of production have been deducted has been little or nothing, this alone does not mean that the processors are responsible for the farmers' plight. Nothing in its study indicates to the Commission that there has been any illegal price fixing either on the farm or in the city, except perhaps in the case of snuff. By its nature the tobacco industry seems to encourage the development of large economic units, and these large units result in centralization of control and lessening of competition. The Federal Trade Commission report suggests that on one side farmers might better their position by organizing cooperatives. On the other side it recommends that Congress consider a change in the tobacco tax to encourage competition.

ADD THE JUICE OF A LEMON

[Concluded from page 19]

growers that lemons are still within reach. It was these people who mobilized last winter to war on the frost that threatened to wipe out southern California's $100,000,000 citrus crop. When the thermometer dropped to the lowest temperature recorded in 15 years, they lighted the smudge pots in the fields and tended them day and night. So dark was the cloud of smoke that soon settled over groves and nearby villages that autos and streetcars kept their lights burning 24 hours out of the 24. Had there been delay in starting the fire the lemon crop would have been destroyed, for lemon trees are more sensitive to frost than any of the other citrus fruits. Then it would have been a long time between drinks of lemonade.

EDUCATORS who want suggestions as to the type of material which should go into adult consumer education classes would do well to read the article, "Food-Buying Practices—a Symposium", in the June 1937 issue of the *Journal of Home Economics*. This article gives information on such questions as "How Efficiently Does the Ordinary Homemaker Do Her Food Purchasing?" "Is She Satisfied With the Food-Buying Situation?" "How Do Purchasing Habits Vary in Different Regions or in Communities of Different Types?" The symposium contains reports on two studies of buying practices. The first was made in Yoakum (Tex.) Independent School District and covered 50 urban and 50 rural homemakers. The second was made in Cumberland County, Pa., and involves the study of 44 homemakers, and 72 high school pupils who had made some study of home economics. Each study concludes with a set of recommendations for consumer education courses based on the findings of the study. Reprints of this symposium may be secured for 10 cents by addressing the American Home Economics Association, 625 Mills Building, Washington, D. C.

STUDY QUESTIONS FOR THIS ISSUE

1. How many weights and measures inspectors are there in your community?
2. How much did their services cost last year?
3. How many inspections were made last year?
4. How do you think this service in your community could be made more efficient?
5. When you buy canned tomatoes, what size can do you select? How many ounces does it hold? How do the tomatoes in this can compare in price to the tomatoes sold in other sizes carried by your grocer?
6. How many farmers depend on tobacco as their main source of income?
7. Which declined more during the depression, the manufactured value of tobacco products or the income farmers received for their tobacco?
8. How did the AAA help to improve the condition of tobacco growers?
9. Did the Federal Trade Commission discover any evidence of collusion in the control of prices by the tobacco industry?
10. How much of the average price consumers paid for cigarettes in 1934 went to tobacco growers?
11. How does the Federal Trade Commission suggest that competition in the cigarette business might be encouraged?
12. Lemons are an excellent source of which vitamin? Why is this vitamin important?
13. Which is the most important lemon-producing State in this country?
14. What are three distinguishing marks of good value in lemons?
15. What services does the California Fruit Growers Exchange perform for its members? for consumers?
16. What are some of the kinds of "human erosion" which a well-balanced diet could reduce?
17. How does the money you have to spend for food each week compare with the amounts shown in "Food Patterns" for the workers studied in your section of the country?
18. What kinds of food and how much of each did you consume last week?
19. How did these foods compare in kind and amount with those for the workers studied in your section?
20. As families get more money to spend for food, which kinds of food do they usually buy in larger quantities?
21. What proportion of the Negro families studied were getting a dangerously low diet? What proportion of the North Atlantic white families?
22. In order to lift "Grade C" diet families up to "Grade A" level, what two things are necessary?

OUR POINT OF VIEW

The CONSUMERS' GUIDE believes that consumption is the end and purpose of production

To that end the CONSUMERS' GUIDE emphasizes the consumer's right to full and correct information on prices, quality of commodities, and on costs and efficiency of distribution. It aims to aid consumers in making wise and economical purchases by reporting changes in prices and costs of food and farm commodities. It relates these changes to developments in the agricultural and general programs of national recovery. It reports on cooperative efforts which are being made by individuals and groups of consumers to obtain the greatest possible value for their expenditures.

The producer of raw materials—the farmer—is dependent upon the consuming power of the people. Likewise, the consumer depends upon the sustained producing power of agriculture. The common interests of consumers and of agriculture far outweigh diversity of interests.

While the CONSUMERS' GUIDE makes public official data of the Departments of Agriculture, Labor, and Commerce, the point of view expressed in its pages does not necessarily reflect official policy but is a presentation of governmental and nongovernmental measures looking toward the advancement of consumers' interests.

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Some weeks ago we advised our subscribers by post card that we were revising our mailing lists and would have to drop from them the names of all subscribers who failed to notify us of their desire to continue to receive this publication.

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SIX AMERICANS LOOK AT EUROPEAN COOPERATIVES

CONSUMERS' Guide

Issued every two weeks by the Consumers' Counsel, Agricultural Adjustment Administration, Department of Agriculture, Washington, D. C.

Vol. IV, No. 8 July 12, 1937

One hundred million consumers, more or less, have an everyday stake in the price of spuds. On page 7 we ferret out some of the difficulties and abuses in the marketing of this important food, reported on by the Federal Trade Commission. How much the uncovering of unfair trade practices can result in fairer prices to producers and consumers, it is difficult to measure.

Far greater in dollars-and-cents importance to growers and eaters of potatoes are the see-saws in supplies and prices that alternatively bring abundance to consumers with poverty to growers and scarcity to consumers with prosperity to growers. Over and over again potato history shows that the reward to farmers for large supplies is a ruinously low price, while below average supplies reward farmers with high prices. High prices one year breed low prices the next year or two.

Witness this recent history. This year up until May consumers were buying mostly old potatoes from the short crop of 1936. Prices to growers and consumers were high. But the potato market turned about face in May when potatoes from the new crop started coming to market in volume. Potato prices usually start going down when new crop supplies move to market, but the large size of this year's crop and the high prices prevailing caused a greater than usual seasonal price decline. The big prices of the year before had encouraged farmers to go in heavily for new-potato planting. In fact, market forecasters expect 1937 production of early potatoes to be over 50 percent larger than a year ago. Prices started moving downward rapidly. During the first week in May the wholesale price in Chicago was $3.77 per 100 pounds. By the first week of June it was down to $1.87. In Mobile the price dropped from $2.52 per 100 pounds in the first week of May to $1.16 the last week of that month.

Season to season see-saws are not the only hazard of potato producers and consumers. There are sudden changes as day to day shipments reach markets. Some days a big supply of potatoes goes to market; maybe at the same time there are rumors of an even bigger supply coming on. Then buyers get panicky, the price drops, trading comes to a standstill.

Steadying the see-saw so that it will not bounce so hard on the ground nor swing so high in the air is the purpose of AAA's potato-purchase program, now going on. When supplies of potatoes come rushing to market in quantities that throw panic into prices and leave little for farmers, AAA steps in to buy some of these supplies. These Government purchases tend to steady prices. When farmers know that prices are not going into a St. Vitus dance within a few hours, they can plan their shipments better. From April to July 3, AAA bought 880,000 bushels at various times and places.

To consumers there naturally comes the question: What good is there to us in steadying farm prices if it has to be done at the cost of reducing the amount of potatoes we can buy? Consumers do stand to gain, however, from such a potato-purchasing program when it does not cut into the normal supplies that they require. The usual swings in potato production give consumers less than normal in the low years. In the top years the amount produced is often more than can be used. Result: Waste in those years, and a sharp cut in acreage to less than normal in the following year or two. In short, variations in supply don't average out in practice to satisfy average needs. Furthermore, since low farm prices one year are followed—almost as night follows day—with small supplies next year, helping farmers to stay in the business of supplying normal quantities is a kind of insurance against high food bills in the future. Being able to cram the potatoes down today does not satisfy hunger next year.

So much for consumers with jobs that bring them in money which they can spend for potatoes. There are other consumers, still millions of them, who have no jobs and must depend on relief to keep them alive. These consumers gain an immediate benefit from AAA's potato purchases. As soon as potatoes are bought, title to them is turned over by AAA to the Federal Surplus Commodities Corporation, a Government-owned-and-administered business, which ships them to relief agencies in the States. These relief agencies then see that the food is distributed to needy families, to help them piece out their meager diets. Thus relief clients get a good wholesome food they need; prices and supplies to other consumers are steadied; and farmers are helped to earn more money so that next year's supplies will not shrink to dangerously low levels.

Some issues back we tossed out to our readers a question. It was this: Would you like to be able to buy goods that were labeled and advertised so as to give you technical facts about their construction, their durability, their contents? First replies that came back were reported on in our June 14 issue. More have come in since, all of them in favor of such informative labeling and adver-

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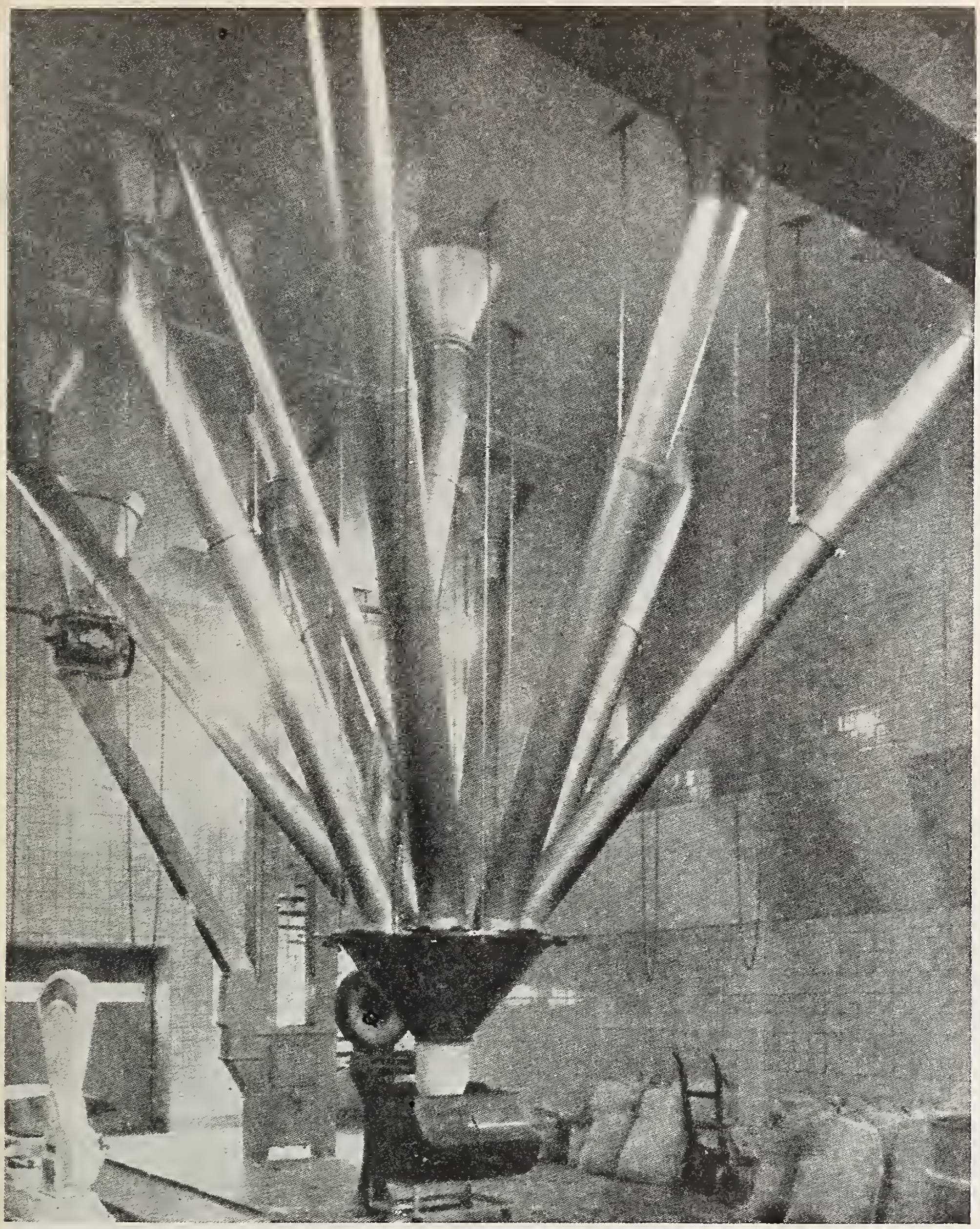

Crisp bread is one of the important food products made by Swedish cooperators. Flour for the bread is being mixed in this elaborate machine in a cooperative factory.

Across the pages of the Report of the Inquiry on Cooperative Enterprise in Europe, now published, moves a vivid picture of how farmers and consumers abroad are attempting to run their own vast enterprises to raise their standards of living*

SIX AMERICANS LOOK AT EUROPEAN COOPERATIVES

LAST summer a small party boarded a ship bound for Europe. The group comprised six people—Jacob Baker, Leland Olds, Charles E. Stuart, Robin Hood, Clifford V. Gregory, and Emily C. Bates—members of a commission named by President Roosevelt to find answers to such questions as these: What had cooperative enterprise accomplished in Europe? What was its significance to us in America? Was it "an economic device that will usher in a new era under the banner of democracy", or was it, as some claimed, "another of those fearsome European 'isms' against which we should quarantine ourselves?"

For 2½ months the members of the official "Inquiry on Cooperative Enterprise" toured England, Scotland, Ireland, France, Switzerland, Czechoslovakia, Denmark, Norway,

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* The complete report, 321 pages, may be purchased under this title from the Superintendent of Documents, Washington, D. C., for 65 cents.

Sweden, and Finland. At first hand they observed working conditions in co-op institutions. They interviewed government officials, industrialists, consumers—in fact, they buttonholed anyone able to throw light on co-op activities.

Once back in America the Commission dragged out its trunkloads of notes and statistics, set to work digesting this material. Result—the recent report to the President, a meaty, 300-page volume on *The Methods and Relationships of Cooperative Enterprise in Europe, The Meaning of Cooperative Enterprise to America,* and *Cooperation at Close Range*—to quote the headings of the three main divisions of the book. More than this, there are fat appendixes chock full of up-to-date statistics on every phase of this "middle-way" method of doing business.

Summing up their findings, the Commission takes the view that co-op enterprise is neither an economic bogeyman that would disrupt our present system of distribution nor a panacea. The Commission had this to say: "From the things we learned and the figures we gathered could be woven an Aladdin tale of cooperative success. From a different selection of material could be built a story of cooperative blunders and mistakes and class antagonism. It has been our task to try to tell the story fairly, to picture accurately a movement that has its full share of human errors, but that has brought new hope, new pride of ownership, higher standards of living, to a substantial portion of the people of western Europe."

The story of European cooperatives, the Commission found, is the story of big business. The report cites the International Cooperative Alliance as listing 108,000 organizations in 89 countries as co-op members. Estimates give co-ops as serving approximately 100 million people scattered around the globe; business of consumer co-ops alone tops 33 billion dollars annually. In Czechoslovakia co-op enterprise affects about 40 percent of the population; in France, 35; in Great Britain, 45; in Norway, 50; in Sweden and Switzerland, 65; in Finland as much as 70. In actual numbers the British consumer movement with its 7,484,000 members is largest.

Big business in the ordinary sense is nothing to set the United States by the ears. Big business in the cooperative way presents a different picture from the one we know in our huge department and chain stores. The Commission points to the differences. Much as the co-op store and the privately run store may look alike, *motive* and *ownership* are different. The private merchant tries to make a profit; the cooperative store tries to supply its customers with goods at cost. In private business each share of stock represents one vote. In a co-op each member has one vote, irrespective of amount of stock owned. In private business profits go to stockholders; in co-ops "profits" are distributed as "patronage refunds" to members in proportion to their patronage (after paying a small fixed interest to the shareholders and setting aside reserves).

In these fundamentals, present-day co-ops in Europe stick closely to the basic doctrines of the original consumer cooperative society—the Rochdale Equitable Pioneer Society, founded in England in 1844. The report gives these principles as: (1) *Open membership and ownership, irrespective of race, nationality, politics, or religion;* (2) *democratic control—one member, one vote;* (3) *limited returns on capital and return of gains to members through patronage refunds.*

European co-ops have accepted pretty universally several other ideas such as: (4) *Cash trading;* (5) *trading at market prices*—thus protecting themselves from the charge of price cutting and from financial loss; (6) *setting aside from surplus earnings a reserve fund of working capital;* (7) *providing funds for promotional and educational work.*

Cooperative enterprise can be classified in various ways: As urban or rural; as consumer-owned or producer-owned; as handlers of different types of commodities. Whichever pattern of categories is attempted, there are many overlapping types which are difficult of classification.

As in this country, Europe can point to cooperative organization among both city and country people. Outstanding in the farm cooperative movement are the Danes, whose producer cooperatives control 85 percent of the export of bacon, 49 percent of the export of butter, 39 percent of the import of fertilizer. Cooperative marketing of agricultural products in Czechoslovakia amounts to $72,000,000 annually. Farmers of Finland, through their cooperative dairies, manufacture about 95 percent of the country's butter supply. Agricultural cooperatives in France operate dairies, cheese and other food factories, insurance, and credit societies. In England they are less developed; in Ireland farm cooperatives are relatively important in the country's economy. Swedish farmers are well organized cooperatively. In Swiss agriculture, cooperative dairies control 90 percent of the country's milk production. Wine growers and cattle breeders have their cooperatives.

Consumer cooperatives in their role as distributors of goods and services range over all possible types of business enterprise; as neighborhood buying clubs, independent city stores, city, regional, or national chains. Annual business of consumer cooperatives in Czechoslovakia amounts to

One-third of Sweden's demand for electric light bulbs is supplied by LUMA, a cooperative.

Sunlight floods this kitchen in one of Sweden's cooperative cooked-food factories.

Many foods sold in this cooperative grocery, 347th opened in Stockholm, are cooperatively made.

Cooperative groceries in Sweden are found in out-of-way villages as well as in big cities.

nearly $100,000,000, not quite 3 percent of the total national retail trade. In Denmark retail trade of consumer cooperative societies comes to about $63,000,000 annually. Between 25 and 30 percent of the retail trade of Finland is done by consumer co-ops. Annual retail sales of French consumer cooperatives total some $233,000,000, of Norwegian co-ops $32,000,000, of Swedish nearly $104,000,000. Swiss consumer cooperators handle from 10 to 12 percent of the national retail trade. Tops among the European consumer cooperatives in volume of business are the British, whose annual turn-over of more than $1,000,000,000 is said to account for about 12 percent of the national retail trade.

Both consumer and agricultural cooperative movements in most countries push behind the function of selling into the field of production. Farm cooperators, in pursuit of bigger incomes for their members, in many countries process the commodities which their members produce. Consumer-owned cooperatives, in their pursuit of lower living costs for their members, acquire and operate factories to produce some of the goods which will later be sold in their co-op stores. Cooperative utilities, usually owned by consumers, build and operate telephone and power lines, generating part or all of the power they sell in their own plants. Some of the housing cooperatives build as well as finance houses and apartments for their members. In France, England, and Czechoslovakia are found workers' productive societies, groups of workmen who own their own factories.

Major attention of the Commission studying European cooperative business went to consumer enterprises. Racial temperament and local conditions dictate different ways of working toward the consumer cooperative goal—a better standard of living for their members—however much co-ops agree on fundamental principles.

British and Scottish cooperators, developing a distributive system in a period when private retailing was not efficient, have extended their activities until now they are in competition with most types of economic activity. Swedish cooperators have placed their emphasis on developing businesses that will serve as "price yardsticks." In their attack on private monopoly they have looked to the cooperative rather than to antitrust laws. Already they have checkmated monopoly in many instances, notably in the case of galoshes, an item that looms large in farmers' budgets. By establishing their own factory, cooperators forced the four Swedish factories with monopoly control of galosh production to reduce price from $2.27 to 93 cents a pair. Result: The doubling of the use of galoshes. Finnish co-ops dealt a similar death blow to price fixing in matches, margarine, flour, and fertilizer manufacture.

Achievements chalked up in the name of cooperatives make an impressive showing to the Commission. Consumer co-ops, they report, usually pay higher than prevailing wages, require shorter hours, pension workers, give generous vacations and sick leaves. They often employ union workers and have arbitration boards to handle what disputes arise. On the side of thrift, it is claimed, co-ops have reduced costs of retailing by large-volume trade, low executive salaries, standardized goods, large-scale buying, reduced advertising expenditures, low credit losses. This has made possible competition with private business. Consumers who never before had saved a penny have been enabled to put aside dollars against a rainy day. Even during the depression, cooperative shares in Great Britain did not depreciate. Cooperatives are credited with doing a big job in promoting education through clubs and classes in economics, business management, and the household arts. The long arm of education has reached out to the general public, co-op members, and employees.

Briefly, the inquirers conclude, co-op accomplishments read something like this—reduction in costs of retailing with consequent benefit to the consumer, promotion of thrift, education, control of monopoly, institution of comparatively high labor standards, better citizenship as the outcome of ownership in the hands of many.

Debit side of the cooperative ledger shows entries too. The report names problems still to be solved—such as the necessity of attracting high-caliber executives, of improving relationships with farmers, of meeting heavy chain-store competition while maintaining trade-union standards, of finding new ways of increasing democratic control, since co-ops have outgrown the old "town-meeting" method of voting.

European governments have taken a kindly view toward cooperatives. Government, the report finds, regards the cooperative movement as a stabilizer. A Swedish banker voices this opinion in saying that co-ops are an antidote to radical political movements, furnishing an outlet for the workers' energies. A helping, rather than a restraining, hand has been held out by some governments in allowing "some access to government credit, some exemption from taxes on plowed-back surpluses, some subsidy to cooperative education."

Members of the Commission pooled their opinions while describing cooperative technique in Europe. Not so when it comes to predictions as to what the cooperative movement can mean to us in America. Then the members speak out as individuals.

Hearing from Mr. Baker first. He finds no reason to think that the cooperative movement will not develop to a considerable extent in the United States during the next generation, particularly since it is "the only way that either producers or consumers can positively control" the spread between producer receipts and consumer payments. It is unlikely, he feels, that cooperation in this country will develop along class lines, nor will it displace Government or private business. In conclusion he calls attention to the judgment of many people in Europe that it is the social elements of the cooperative movement that give it greatest significance and appeal to the rising generation.

Mr. Olds, in summarizing the strengths and weaknesses of co-ops, enlarges upon the spiritual benefits inherent in the cooperative way. He says that the "cooperative movement would extend the cooperative system of living which was characteristic of the older family life to the control of the commercial market by groups of families." For this reason, it is Mr. Olds' opinion that cooperative enterprise deserves our serious consideration as a way of perpetuating the American idea.

Mr. Charles Stuart describes the factors accounting for the remarkable growth of consumer cooperation in Europe. To quote Mr. Stuart, "Consumer cooperation came into existence in Europe chiefly to protect homogeneous, stable groups of workers of small income from an antiquated, inefficient system of retail distribution which was free from

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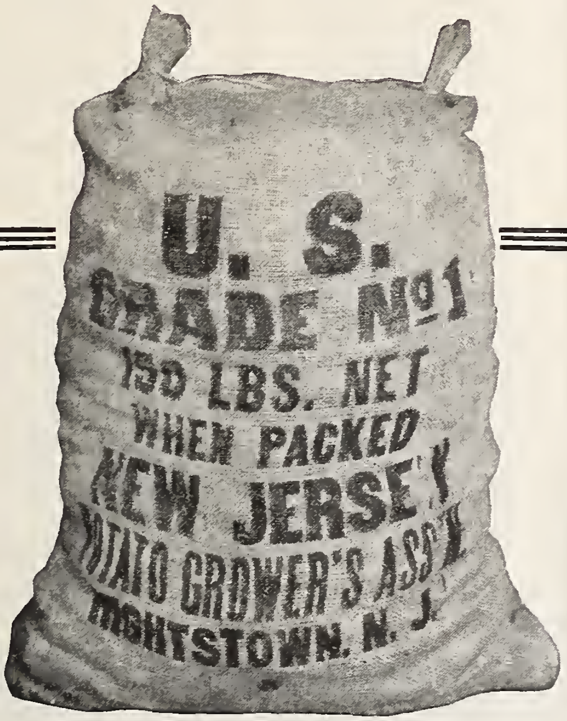
POTATO PROBLEMS



Champion among all vegetables, potatoes raise problems of production and distribution on which the Federal Trade Commission turns its searchlight, revealing new facts on where consumers' potato dollars go*

To what extent, Congress asked the Federal Trade Commission, are unfair, fraudulent, or injurious methods employed in the grading, warehousing, and distributing of farm products? To answer this question the Federal Trade Commission looked at the homely, friendly potato, dug into potato statistics, sent investigators into important potato markets, and now, in its report on Agricultural Income, the Federal Trade Commission presents its answer. This question was only one of many that Congress asked the Federal Trade Commission. The potato was only one of seven farm products studied by the Federal Trade Commission. For a discussion of the Agricultural Income Investigation as a whole readers should see the Consumers' Guide of May 17, 1937.

Background facts that help consumers to understand the findings of the Commission's report show potatoes are the world's champion farm crop. World average potato production per year from 1920 to 1930 was approximately 7 billion bushels. For these same years the total world wheat production was approximately 5 billion bushels annually. In the United States in 1935 the total farm value of potatoes produced ranked seventh among United States crops with a total of 209 million dollars. One-half of all United States farms raise potatoes each year, but only one-sixth, approximately 600,000, raise potatoes commercially. In 1935 United States farms produced 356 million bushels of potatoes.

Champion potato State in 1935 was Maine, which produced 11 of every 100 bushels of our home-grown potatoes. Next in importance was Minnesota with 8 out of every 100; then Michigan with 7; Pennsylvania, New York, and Wisconsin with 6; and Idaho with 5.

Potatoes are a year-round food, one year's crop overlapping another in its movement to market. Beginning with early potatoes from Florida in December, potatoes stream to consumers from Texas, Louisiana, Alabama, South Carolina, Georgia, and California. The source of potato supply moves steadily north with the summer sun until late in September potatoes begin to flow from the late-potato areas, flooding markets in October. While supplies of one year's crop come marketwards from storage houses in winter months, a new year's crop starts trooping to market from southern farms. Four out of every five potatoes produced come from Northern States; early and intermediate producing States supply the fifth.

Nearly 2½ bushels per person go down the red lanes each year.

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* This is the third of a series of articles based on the Federal Trade Commission's inquiry into agricultural income. Earlier articles in the series appeared in our May 17 and June 14 issues.

Cheapest ordinarily in October and November, potatoes are usually most expensive in April and May when storage supplies are slim and supplies of new potatoes are not yet abundant. Because consumers as a whole do not change their potato-buying habits much over the years, when the supply of potatoes is short they usually pay very high prices.

Farmers' fortunes swing on the size of the crop and contrarily are usually highest when crops are small. A short potato crop will often produce a larger total income for growers than an abundant one. Low prices, although they stimulate consumers to buy a few more potatoes one year, also lead to reductions in potato acreages and consequently to much higher prices for consumers a year or two following.

To correct a situation brought about by ruinously abundant potato crops, growers already familiar with the benefits of the cotton and tobacco programs pressed for a similar potato program. The Potato Act of 1935 would have taxed all those potatoes marketed in excess of normal consumption needs of the country. Potatoes equal to the normal consumptive needs of the country would have been tax free. The act was not intended to affect the noncommercial grower of potatoes. However, before the act became effective it was repealed on February 10, 1936. Since that time Government efforts on behalf of the potato grower have been confined to the purchase of surplus potatoes for relief distribution and to informal guidance in an effort to eliminate ruinous price fluctuations.

Early potato problems in the South, the Federal Trade Commission points out, begin with potato planting. Potato farmers need anywhere from $70 to $125 in cash to finance each acre of potatoes. Many farmers borrow the money for seeds, fertilizer, labor, and containers from fertilizer companies, potato dealers, and production loan associations. Usually they pay high interest rates and relinquish to these financial agencies and dealers the right to market their potatoes. Loan and interest are repaid by deductions from the proceeds of the sale of the farmer's potato crop.

Five kinds of organizations supply Southern potato farmers with credit. Production Credit Associations, organized under the Farm Credit Administration, lend some of the money, farm cooperatives lend an insignificant amount, while fertilizer manufacturers, banks, and potato dealers lend the rest. Cheapest and most democratic sources of credit are the Production Credit Associations which are managed by the farmers themselves, under the supervision of the United States Government. Unfortunately, the amount of money farmers may borrow from these associations is limited. In Charleston, S. C., the maximum loan per acre is $70. When this is not enough to finance the potato crop the farmer must borrow additional money from other agencies at high interest rates.

Potato financing by one fertilizer manufacturer is described by an executive of a fertilizer company. In an interoffice memorandum this executive said, "The way we conduct our business is this. Through our agents we buy and furnish the farmers with his potato seeds, furnish him with his fertilizer, and furnish him with his barrels. We allow him a certain amount of his expenses for harvesting his potato crop. The crop is turned over to us and we market it. We deduct from the proceeds all that is owed us assuming there is enough to pay and if there is anything left we keep one-fourth of it and give the farmer three-fourths. Year in and year out if you are able to finance and operate this way you will stay ahead of the game and make money."

How costly this is to some farmers is evident from the letter mentioned above, fertilizer costing the company $18 was charged to the farmer's account at $28 and $30. Seed costing the fertilizer company $2.25 was charged to the farmer at $3.50. All supplies were marked up by this company anywhere from 50 to 75 percent. On top of these charges the farmer had to pay an additional 25 percent as interest.

Only 25 percent of the potato farmers in the South are able to finance themselves, a relatively small number of farmers are financed by Production Credit Associations, the remainder depend on fertilizer manufacturers or local dealers for financial aid. Farther north the percentage of farmers able to finance themselves increases, so does the number of farmers able to secure credit from Production Credit Associations, though even in Maine 10 percent of the potato farmers are financed by dealers.

Methods of potato marketing depend upon the type of potato financing. Farmers able to finance themselves sell their potatoes either to dealers in their farm community or to chain-store buying associations. Those living near large cities also sell their potatoes directly to retailers, sometimes at farmers' markets, sometimes to itinerant truckers to resell the potatoes from their trucks to retailers. Some potatoes are sold through farm cooperatives. However, most are sold to dealers who either purchase them for their own account or for resale to large city dealers known as carlot receivers. Chain-store marketing agencies which are important factors in the potato economy are discussed later in this article.

New and intermediate potatoes which are financed by dealers and fertilizer manufacturers are sold through them to carlot receivers in large cities. Carlot receivers in turn sell to produce wholesalers and jobbers who sell to retail grocers. Late crop potatoes from the Northern States are sold by the farmers directly to dealers, and, by farm cooperatives, to chain stores and carlot receivers.

After they are purchased from the farmer the spuds are shipped to cities usually by railroad, though on the eastern seaboard some go by water. Perhaps 25 percent of all potato shipments are moved by truck.

Transportation is an important component of potato prices. It has been estimated that one-third of the wholesale price of potatoes represents the cost of transportation alone exclusive of handling charges, either at the shipping or the receiving point. From 11 to 27 percent of the retail price of potatoes represents the cost of potato transportation.

Railroad transportation costs in some cases not only represent legitimate charges; they also represent the cost of certain dishonest practices. In the Midwest the Federal Trade Commission found that many potato dealers habitually made dishonest claims against the railroad for damage in transit. The interoffice correspondence of one potato dealer revealed excessive claims for damage which sometimes did not even occur, padded labor costs, and a special technique for making fraudulent claims. In some centers dealers refused to ship potatoes by railroads which did not pay excessive damage claims readily. Railroads, to retain their business, were forced to overlook the obvious fraudulence of many of the claims made against them. Fraudulent damage claims result in high freight rates, high consumer potato prices, and in unfair competitive advantages for dishonest potato dealers against their honest competitors.

Spraying is one of the devices farmers use to cut down losses due to parasites and disease.

Prices which consumers pay and farmers receive for marketed potatoes are affected by the total amount produced. In years of big crops, millions of bushels may never reach market because prices which farmers receive are too low to pay them to harvest their extra bushels or to ship them when harvested.

Problems beset the potato wherever it goes. In a number of cities the physical arrangement of terminal markets has given rise to racketeering, useless handling of potatoes, and an excessively high final price to the consumer. In Boston, where the railroad terminal is also a market for potatoes, potatoes get to the consumer with very little hauling around and a very few additional charges, but in New York and Chicago, where there are many terminals, many inefficient practices have become traditional; potatoes are hauled this way and that, piled here and there, shipped and trans-shipped, each movement adding another charge on the consumer's potato dollar.

Glaring example of potato mishandling in New York shows in shipments by water. Potatoes are unloaded at one pier, shipped across the river to New Jersey, then brought back on barges to another pier in New York City. In another case potatoes sold from freight cars are loaded on trucks, hauled 30 feet, then unloaded to be loaded into other trucks and hauled away.

Collusion between racketeers and trucking companies in New York City resulted in monopolies by which independent truckers are prevented from delivering potatoes in the city. When independent truckers did attempt to make deliveries in the city they were held up and assessed enormous prices for the privilege of entering the city. Truckers who refused to pay these prices were beaten up and had their trucks overturned. On June 10, 1937, however, New York courts sent a number of their racketeers to jail. Racketeering not only hurt consumers by increasing food costs, it also hurt farmers by barring the use of markets to them, and it enabled dishonest dealers to compete unfairly with honest dealers.

Another direct consumer abuse was discovered by the Federal Trade Commission in the use of brands and grades by dealers. An undetermined number of potatoes carry U. S. Government grades. Eighteen States have laws or regulations urging that quality grades be marked on containers. Many farm cooperatives and some private dealers package potatoes in branded sacks and containers. By identifying their brands with U. S. Government graded potatoes of high quality, cooperatives and dealers try to create consumer demand for their products and try to secure for themselves a stable market. The Federal Trade Commission discovered that these efforts are sometimes defeated by the fraudulent misbranding of their products by some wholesale dealers. In Boston some dealers bought potatoes in bulk carload lots, then packaged them in second-hand sacks carrying well-known brands and stamped with U. S. Government grade names. These potatoes were then sold as authentically graded and branded potatoes.

Some States attach grade designations to the bag of potatoes by tags. In Chicago the practice of removing these tags and attaching fraudulent grade names to the packages of potatoes had become so general that unions there had a standard price for removing the grade tag, $3 per carload. One dealer in Chicago wrote to an agent requesting him not to ship potatoes in packages with stenciled grade names, for then they could not be obliterated without leaving evidence of the obliteration. Consumers can take heart, however, for the United States Food and Drug Administration and the Bureau of Agricultural Economics recently joined forces in a determined drive to clean up the misbranding and misgrading, not only of potatoes, but of all fresh fruits and vegetables.

One billion pounds of Maine potatoes were studied by the Federal Trade Commission to determine how the consumer's dollar for Maine potatoes was divided among farmers, distributors, and transport agencies. Potatoes were traced from the farms in Maine to the final retail purchaser in Boston, New York, Philadelphia, and Baltimore chain stores. The study covered the period from October 1935 to December 1936. Results showed that 46 cents out of the potato dollar went to the grower, 23 cents to the retailer, 3 cents to the wholesaler, 19 cents to railroads and other transit companies. Packing and loading and unloading agencies got 7 cents, and the remaining 2 cents went to carlot receivers, to brokers, and to storage agencies.

Idaho potatoes were traced in the same period by Federal Trade Commission experts from the Snake River Valley in Idaho almost to consumers' ovens in nine large cities—New York, Minneapolis, Philadelphia, Chicago, Kansas City, St. Louis, Dallas, New Orleans, and Detroit. Retailers, it was found, got 26 cents of the consumer's Idaho potato dollar; wholesalers' share was slightly less than 2 cents, brokers and carlot receivers took 2 cents for their services, freight and other transportation cost 27 cents, packing, loading, and unloading cost 8 cents, leaving the farmer 35 cents.

Fifty-four cents of the consumer's Eastern Shore potato dollar went to growers. The retailer received 19 cents as his share, brokers and other carlot receivers took about 2½ cents, transportation and freight charges amounted to 14 cents, packing and loading to 10 cents, and the wholesalers 1½ cents.

Potatoes shipped from Hastings, Fla., to New York City were studied by the Federal Trade Commission. Examining these Florida potato dollars, the Federal Trade Commission found that 30 cents of each dollar went to the farmer, 13 cents to the dealer in Florida, 11 cents to the transportation company for moving the potatoes from Florida to New York, 12 cents to the potato handlers in New York City, that is, to the men who hauled the potatoes within the limits of that market, 5 cents went to the commission merchant, and 30 cents to the wholesale jobber and retailer.

Monopolies, the Federal Trade Commission found, did not exist in the farm marketing centers, though there was a high degree of control by a few dealers. In the Eastern Shore district of Maryland five dealers purchased 90 percent of the potato crop. In North Carolina three dealers purchased 60 percent of the crop; similar conditions existed in Georgia and Florida. Nationally, five companies purchased 35 percent of the crop, three of these companies purchased for chain stores, one was a private produce company, and the other, a farm cooperative. One company, representing a Nation-wide chain of grocery stores, purchased 13 percent of the potato crop. This marketing agency had a main office in New York City and 5 divisional offices in other large cities. It had 50 terminal sales offices which covered 500 markets where potatoes were sold in carload lots. In addition, its 85 field offices scattered in growing centers throughout the country were all connected by teletype. Constant communications between the various offices enabled this company to secure the lowest prices available on any particular day.

These activities tended to produce a uniform price for potatoes throughout the country, since each potato market had to meet the best price of every other potato market to get this chain's business. The chain's purchases rarely exceeded 30 or 35 percent of the produce in any one market, but because these purchases were concentrated in one company they often determined the price of potatoes. No evidence of undue control was discovered by the Federal Trade Commission.

To the accusation that chain-store purchases tend to depress prices to farmers the Federal Trade Commission says in some cases "the practice of one chain in buying at a price differential equivalent to brokerage tends to become a constant price depressant"; but to balance this, the Commission points out, chain stores also help farmers by buying up potato surpluses in glutted markets and selling them through Nation-wide sales to consumers. For, according to the Federal Trade Commission, "The proportion of the total retail sales of potatoes which are made by chain stores is so large as to require substantially all retailers to sell at competitive prices." To the critics of chain stores who charge that chain stores use potatoes as loss leaders, the Federal Trade Commission replies that its tabulations "demonstrate beyond question that as a general policy the chains sell potatoes at a substantial advance over the wholesale price."

Monopolistic practices were found in two of the cities studied by the Federal Trade Commission—Chicago and New York. Agreements among dealers to fix prices and to parcel the business of a city among them-

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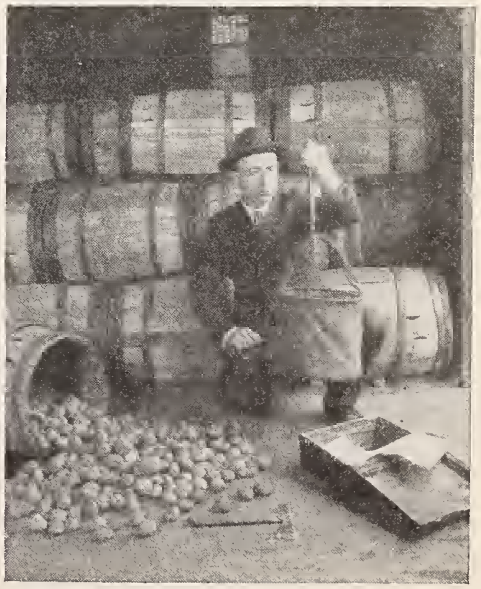
United States Food and Drug Administration and the Bureau of Agricultural Economics recently joined forces in a determined drive to clean up misbranding and misgrading of fresh fruits and vegetables.



Indians of the Southwest still hold fall harvest festivals. Note the corn-husk headdresses of these braves about to take part in the corn dance.

A NATIVE AMERICAN

Sweet corn, perennial legacy from Indian days, comes most abundantly to market in July and August. Here are some pointers on how to pick and prepare this top-flight energy food

ARROWHEADS and tomahawks, pipes of peace and pottery—legacies of our American Indians—may be relegated to the showcases of museums, but some things inherited from the Red Man we have found too good not to adopt for our own. One of these is corn on the cob.

Now the custom of eating corn on the cob is so well entrenched in American life that it has assumed the status of a national summer sport. Come June or July we inevitably tuck our napkins under our chins preparatory to dispatching with gusto a steaming dish of sweet-corn ears, nothing daunted by the fact that most Europeans regard corn as a food fit only for barbarians. Moreover, we go the Indian one better in adding butter and salt to bring out the full flavor of the plump corn kernels.

Life itself depended upon corn culture at one time. Indian maize—now known as corn—could be stored during winter months. Thus it proved a certain source of food when game was scarce and berries a memory.

For this gift the Indians gave thanks to the gods in their Corn Dances held just before the maize hardened into seed. These festivals—celebrated as a sort of Indian Thanksgiving Day—were the big yearly event for many tribes. In the Great Lakes region corn dances still take place, with scattered tribes from the surrounding territory gathering for this gala reunion. The Indians of the Southwest stage elaborate harvest festivals every fall, the celebration always ending with a feast in which the eating of boiled corn serves as the crowning ceremony.

Actually but a small part of the Indians' corn supply went to fresh eating corn. More went into storage bins, was dried and ground for maize flour. So it is now. Our waving cornfields, stretching mile after mile through the Middle West, weren't planted to corn so that we might have tender ears for roasting in the husk or boiling on the cob. They are largely given over to *field* corn to provide grain and animal fodder. Field corn, it is true, can be eaten by man, but it lacks the sweet flavor that characterizes sweet corn (a quite distinct type) as a table delicacy.

Sweet corn concerns us most at this season for it is only from June to October—depending upon the area—that we can satisfy our appetite for fresh corn on the cob. All year round, however, we can get sweet corn in some form, for great quantities of it go into commercial canning. A newcomer to the commercial world, *frozen* corn, has swung into high favor with consumers in the last few years.

How much sweet corn is grown no one knows. Look over the home gardens in almost any State in the northern two-thirds of the United States and you are sure to see the stalks of sweet corn towering above the other vegetables. Truck gardeners plant it throughout the North for local consumption—making successive plantings of one early variety or several different varieties so that their corn supply will last until the first frosts of autumn.

Because sweet corn is too perishable to travel long distances, there are no records of carlot shipments. Production figures for canned sweet corn—and the greater part of sweet corn goes into cans—are recorded. The 1934 sweet-corn crop for manufacture was about 500,000 short tons—128,000 tons less than the average from 1928 to 1932. Drought ravages accounted for this low figure. However, in the succeeding year production leaped ahead to a high of 860,000 tons, then dropped to 605,000 short tons in 1936. Acreage marched steadily forward from 200,000 acres in 1933 to 400,000 in 1935—more acres than had been planted to sweet corn in the predrought years. In 1936 it stood at 370,000 acres. Farm value in one year doubled to reach an $8,000,000 high score for 1935, then fell off 25 percent in 1936.

Biggest sweet-corn States competing in commercial production are Illinois, Iowa, Maryland, Minnesota, Ohio, New York, Indiana, and Maine. Wisconsin, Michigan, Delaware, Tennessee, and Pennsylvania take second rank, with other States trailing the field.

Northern growers have an edge on southern planters since high temperature leads corn to pass its prime quickly. Naturally, canning industries locate in the cooler sections where corn is in topnotch condition as many as 5 or 6 days, as against 2 days in southern sections. Moreover, northern corn owes part of its reputation to the *varieties* that flourish in these sections.

Three varieties of sweet corn were mentioned in the "Gardener's Textbook" published in 1854. An article appearing in 1884 described 35 sweet-corn types. So numerous are the varieties at the present time that we have lost count. Best known varieties, both yellow and white, may be classified according to the time of season they mature.

Golden Bantam, widely grown in the northern sections, is one of the earlier varieties of sweet corn. Its waxy, golden-orange grains are set in eight straight rows along ears that are about 5 inches in length. It has a delicious flavor unlike the mealy taste of some of the corns.

Crosby, with its stalks climbing about a foot higher than Golden Bantam—that is to 5 or 5½ feet—is a good midseason variety. The 10 or 12 rows to an ear carry small white kernels.

Stowell Evergreen, medium to late in season, has been so well thought of that growers have chosen it for breeding experiments. The stalk shoots up to 7 or 8 feet. Ears are large, bearing as many as 20 rows. Kernels are evenly placed and are white and long in appearance. A little sugary in taste, Stowell Evergreen remains good a long time.

Late maturing is Country Gentleman, often called Shoe Peg Corn. The white sweet grains are deep set in such irregular formations that no rows are apparent on the husked ears.

Good flavor has thrown these varieties into the spotlight for eating fresh on the cob, although other varieties such as Golden Early Market and Whipple Early Yellow deserve mention. The tendency is to give preference to yellow corns.

Style of pack and method of handling have influenced choice for canning purposes. For instance, yellow varieties suitable for whole-grain packs are popular these days. But in the main it is climatic and economic conditions which have swung certain types into first place. Growers are always on the lookout for a variety that will give the greatest tonnage per acre, since they are paid by the canner on this basis. Canners want to get the highest yield of canned corn per ton of raw stock. Climate permitting, therefore, the variety chosen will be late maturing and deep grained. This accounts for the perennial popularity of Stowell Evergreen and Country Gentleman in the canning business.

Growers, seedsmen, and canners have given much attention to the business of developing good sweet-corn varieties. This is easily understood when we realize that because of the way it reproduces, corn seldom breeds true except for the simplest

Isolated plots such as this are used in commercial production of hybrid corn seed. Faint gray lines mark the rows of corn to serve as male parents. Between them are the detasseled plants which serve as the female parents.

characteristics. The individual corn plant does not usually pollinate its own seed. Every corn plant is both male and female. The staminate or male part is the proudly waving, pollen-filled tassel at the top of the stalk; the egg is at the base of the silk which leads through the husk to the corn kernels. Since wind carries the pollen, each kernel on an ear may be pollinated from a different parent plant.

That is why, to develop dependable strains of corn, growers have taken the matter out of Nature's hands. They carefully select a fine plant for breeding purposes, then tie paper bags over both tassels and ears. Later they sprinkle the pollen that has collected in the topmost bag on the ear of that same plant. This process, repeated for five or six corn generations on successive selections, results in an inbred corn that produces much the same fine kernels year after year. To merge the good qualities of several strains, growers have planted rows of the two parent strains side by side, detasseling the plants that are to serve as the females.

Golden Cross Bantam is such a hybrid, having the best qualities of both parents. Because of its hybrid character, its progeny will be of diverse nature—in no way resembling Golden Cross Bantam. For that reason Golden Cross Bantam corn cannot be grown from the seed saved from Golden Cross Bantam plants, but must be produced anew each time by crossing two corns—Purdue 39 and Purdue 51. In spite of higher prices asked for such seed, the uniformity, productivity, and quality put hybrids in demand.

Corn is most delicious eaten right after picking, whether it is boiled, steamed, or roasted. One rule states: "The best corn for eating is harvested in less than thirty minutes from the time the butter is placed upon the kernels." But unfortunately most consumers cannot pop the ears from the garden into the cooking pot. For them, a few buying hints are in order:

Corn found in market is of two types—either sweet or field corn. The latter is usually an early maturing variety of field corn. In the South, particularly, where sweet corn falls easy prey to earworms, farmers grow the tender varieties of field corn for human consumption. It may be as tender as sweet corn but lacks the sweet taste that has a big consumer appeal. You can recognize sweet corn at a glance by the dark green husks with odd ribbon-like ends which hang free and give an unkempt appearance. The field corn lacks these streamers. However, many retail grocers trim the husks from the end of the ear, so that this distinguishing mark may be lost. Ears of sweet corn are usually smaller than those of field corn.

In prime condition an ear of corn has a tuft of silk trailing out of the tip. These strands should be brown

"Hand-bagging" of the ears and tassels is one way of controlling pollination in the development of good inbred lines of corn. Bags are placed over the tassel of a corn plant and over the ear. Then both bags are removed and pollen from the tassel bag sprinkled over the silks of the ear. Once again a paper bag caps the ear to protect it from stray pollen.

and crisp where they leave the husk but close to the ear should be pale green in color, succulent, and slightly elastic. Husks should be fresh green and tightly wrapped. The pithy stem, where the ear was broken away, should be green also. Dry or straw-colored husks indicate age or damage. Then kernels will be tough, discolored, and flavorless.

Once you have picked out your green, sweet-smelling ears, strip back the husks of one ear. Bright, plump kernels, just firm enough to offer resistance to pressure, should fill the cob. If pricked, they should exude a milky juice. Since kernels dry out quickly, leave the husks around the ear as protection until the last minute before cooking.

Remember, a slender ear of corn may have just as much kernel as a large, coarse ear. Don't discard an ear if worm injury is present at the very tip. Cut off this part, but watch out for worm injury running along the side as this spoils the whole ear.

High quality in sweet corn and high sugar content are inevitable companions. During the ripening process, the kernels run through four stages called the premilk, the milk, early dough, and dough. It is in the milk stage when kernels are plump that flavor is best. Then is the time when ears are harvested before the sugar changes to starch, as it does with approaching maturity. However, the ripening process continues even after the ear is in the market basket. High temperature hastens the transformation of sugar to starch. That is why a hot day will leave your corn ears starchy and tough. If you have space in your ice box, that is the best place to keep corn.

Given the finest ears in the market, the cook can ruin the flavor by neglecting the few commandments of corn cookery. Bring the salted water to a boil before dropping in the corn ears. Once the ears are in the kettle keep the water at a simmering temperature (185° F.) to prevent toughening. Though we often speak of boiled corn the phrase is really a misnomer. Ten or fifteen minutes is quite long enough, though very tender ears are ready for serving in half that time. Such corn is ready for eating as soon as the milk has set.

Canning factory wastes such as these husks and cobs formerly were considered worthless and hauled away to dumping grounds. Now these wastes constitute a valuable byproduct, used as silage or as fertilizer.

Corn is a top-flight energy food, whether boiled or roasted. If you are going to play several sets of tennis, or chop the winter wood supply, corn is one of the dishes for you because of its carbohydrate content. Corn is rich in sugar, still richer in starch, and we have already noted how the starch content grows with maturity. Corn has some protein, a little fat, a lot of water, a goodly quantity of Vitamin B, and some Vitamin C. Yellow corn that has a yellow endosperm also contains Vitamin A.

Corn canning is one of our large-scale industries. In fact, sweet corn ranks among the three most important canned vegetables in the United States. In 1935, about 21,500,000 cases of corn left the packing plants. Even the factory wastes—the husks, shanks, silks, and cobs—run into big money, for these valuable byproducts sell as manure and silage. Canner and farmer fortunes rise and fall together. In the East the canner usually contracts with individual growers for corn, but in the West often he grows his own corn. Biggest corn-canning section is in the Midwest.

Maine began the business of corn canning. Here Isaac Winslow, a sailor, who had learned in France methods of preserving foods, began his experiments. From his first trials, which consisted in boiling corn on his kitchen range, the modern corn-canning plant developed—a huge establishment equipped with automatic machinery that will do all the work of canning so that no human hand need touch the corn from the time the ear feeds into the cutter until the can is sealed.

Canned corn stands upon the grocery shelves packed in two styles—

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Thirst Quencher No. 1

Along with minerals and vitamins, star WATER as an essential regulator of routine body functions*

THIRST is such a positive and disagreeable sensation that we are quick to quench it. In our homes, in our schools, in our places of business, drinking water is so accessible to most of us that we seldom think of how dependent we are on it for life itself. A human being can live for a much longer time without food than he can without water. To test scientifically just what effect an insufficient intake of water has on a human being, a group of young men allowed themselves to be experimental guinea pigs. After living for a few days on food of which the water quota was very low, they developed headaches, showed signs of nervousness, loss of appetite, and were unable to concentrate on their work—all indications that their bodies were not functioning normally. When their water supply was increased, these symptoms of physical disorders disappeared.

Two-thirds of our entire body weight is water. Our brain alone is 70 to 85 percent water. Through the blood plasma, which is over 90 percent water, nutritive material is carried to every one of the trillion of cells in our body and these same cells depend upon water to carry away their waste products. It serves as the liquid in which all the chemical reactions in the body take place.

Chemical formula for pure water is H_2O which means that in a drop of water, for every two atoms of hydrogen there is one of oxygen. We get most of our daily quota of water in pure form, or in other beverages, but when we eat even the driest cracker we are adding to our water supply. Water is present in all foods in varying amounts. Meats and the fuel foods, high in calories, such as macaroni, sugar, and butter, which we eat to give us energy, have a lower water content than fruits and vegetables. Over 90 percent of many fruits and vegetables is water. Tomatoes and oranges are good thirst quenchers because of their high water content. Tomatoes average about 94 percent water, oranges about 87 percent. Watermelon, a favorite hot-weather dessert, is a little over 92 percent water.

Water comes cheaper, it is true, from the tap than from succulent fruits and vegetables, but tap water does not carry with it the valuable vitamins and minerals that, with water, come packaged in these foods and put them on the required list for well-balanced diets.

Besides our daily intake of water, the combustion of fuel foods which takes place in our bodies is constantly producing water—known as metabolic water. Some varieties of insects and animals need never drink water, as the metabolic water which their bodies produce from fuel foods is sufficient to meet all their needs to maintain life. Other animals can go for long periods of time without drinking water. The camel in his long treks over the desert carries his water supply in his hump, not in the form of H_2O but as fat. As his body burns this fat to produce energy, water is also produced.

A human being is constantly losing water through his skin as well as through his lungs, alimentary tract, and kidneys. In strenuous exercise he may literally sweat out pounds of water. For instance, 13.75 pounds of 14 pounds of weight lost by a football player in 1 hour and 10 minutes of play was calculated to be water.

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*Other special articles in this nutrition series have been published in these issues: Apr. 20, May 18, June 15, June 29, July 27, Oct. 19, and Nov. 2, 1936.

Though the water balance of our bodies can be upset by excessive perspiration or can be seriously upset by illness, the impulse to satisfy natural thirst normally helps us to regulate our water supply.

Main requirement for drinking water is that it be wholesome, that is free from any disease-carrying bacteria. Wholesomeness in water is very different from purity. Even rain gathers some impurities as it falls to earth. Impurities in water are either organic substances, such as bacteria (not all bacteria are harmful to man), or inorganic substances—suspended matter like sand or clay, or dissolved matter such as calcium and magnesium compounds and gases. As a matter of fact most cities add inorganic substances to their water supply to disinfect it and to give it the characteristics we desire. Though muddy water with a fishy taste and odor may be "safe" drinking water, few of us would care to drink it. We prefer water that is clear, colorless, tasteless, and odorless.

Chlorine is the most common disinfectant used in city water supplies. Generally it takes only from 1 to 2 pounds of liquid chlorine to make a million gallons of water safe for drinking.

Many city water supplies are run through a filtration plant where the water runs through a series of beds of sand and gravel before it is piped out to the consumer. This process clarifies the water, removing bacteria and substances that would make the water muddy.

Two cities, drawing their water from different sources and treating them by the same process, may each have a different type of water. The supply of one city may be "hard" while that of the other is "soft." The hardness and softness of water depends on the amount of the dissolved minerals it contains. Soft water contains little dissolved minerals. Some of the minerals we need in our daily diet are present in water, but the amount is usually so small that we do not depend on drinking water as our mineral source. If New York consumers were going to depend on their water as a source of calcium they would have to drink 25 gallons of water to get their calcium supply for one day, while they could get the same amount in three to four glasses of milk.

For healthy people there is little restriction on the amount and time to drink water. Four to six glasses, besides the water we get in our food, is usually considered a normal amount. Experiments have proved that a reasonable amount of water with meals will stimulate the digestive juices and facilitate digestion, but it is best to drink water with the meal than just before starting to eat. If one drinks too much water before eating, the stomach will be filled with water and there will be little space or appetite for solid food.

Many people believe that ice-cold water is not good for one, that it chills the stomach and delays digestion. Experiments have shown that in 20 minutes after drinking ice water the temperature of the stomach is the same as that of the rest of the body . . . the same period of time it takes for the stomach to attain the body temperature after a cup of hot coffee. There is one time, however, when we should carefully refrain from drinking ice-cold water and that is the time when we want it most—when we are overheated or have been exercising vigorously.

A NATIVE AMERICAN

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the whole-grain style or the cream style. In the latter, the grain is cut through and the contents scraped out, leaving part of the skin attached to the cob.

Direct help to the housewife are the quality standards set up by the Department of Agriculture for grades of canned corn—U. S. grade A (fancy), U. S. grade B (extra standard or choice), U. S. grade C (standard), and Off-grade (substandard). These grades apply to both styles of canned corn, the whole-grain and the cream style, and are based on such qualities as color, absence of defects, consistency, cut of corn, maturity and flavor—with maturity scoring highest and flavor next in the total award. For Regulatory Announcements 138 U. S. Standards for Grades of Canned Corn—Whole-grain Style, and 139 U. S. Standards, for grades of Canned Corn—Cream Style, apply to the Bureau of Agricultural Economics, United States Department of Agriculture, Washington, D. C.

Canned corn must be sealed in containers that are sound and clean. Labels must comply with requirements of the Federal Food and Drugs Act. Should the space between the top of the product and the lid be excessive, a legend will warn, "Below U. S. Standard—Slack Fill." If too much brine has been added, an extra admonition will tell the consumer, "Contains Excess Added Liquid."

First number of a new consumer publication was issued to the public on June 2. *The Consumer* is the official publication of the Consumers' National Federation. Feature article of this issue is titled "Price Control Conflicts", by Arthur R. Burns, Associate Professor in Economics, Columbia University. Persons interested in securing copies of *The Consumer* or in knowing more about the activities of the Consumers' National Federation should get in touch with the organization at Room 1517, 205 East 42d Street, New York, N. Y.

SIX AMERICANS LOOK AT EUROPEAN COOPERATIVES

[Concluded from page 6]

Government regulation as to prices charged or character of goods sold and was supported by the doctrine of 'caveat emptor' . . ."

Here in the United States, Mr. Stuart observes, almost all of these primary conditions are lacking. If consumer cooperation does spread here, he feels that it will be in response to different needs. Failure of competition or Government regulation to protect consumer interests, unsatisfactory retail merchandising in some areas, elimination of chain stores by taxation, racketeering—these are factors which Mr. Stuart points to as possible aids to the cooperative movement in this country. Mr. Stuart believes that both our Federal and State governments should foster cooperation, within "proper limits", that is, they should *not* artificially stimulate growth. What development comes should be through a natural process of evolution.

Mr. Hood expresses the belief that present-day America lacks the conditions that would make for widespread growth of consumer cooperatives. He warns specifically against Government high-pressure promotion of the cooperative idea, adding, however, that "any group of people who believe they can purchase their requirements more advantageously through cooperatives than through private enterprises should be fairly accorded their rightful opportunity to make the effort."

Mr. Gregory places first in his list of accomplishments of European consumer cooperatives that "they have completely eliminated financial racketeering in that part of the business field which they have taken over . . . no fat promotion fees . . . no watered stock . . . no domination of business by money lenders . . ." Also, he says, "they have added to national stability, have raised standards of living, and have given to many people a new interest in life, a new and useful outlet for their energies."

Mr. Gregory adds do's and don't's for business and consumer cooperatives so that they can thrive side by side, providing beneficial competition. He warns consumer cooperatives against the dangers of not serving consumers with singleness of purpose, of not keeping out of politics, or avoiding the desire to establish a cooperative monopoly. He says that co-ops should go into business only to the extent of keeping prices down rather than adopt the English objective of a cooperative commonwealth. Nor should co-ops become involved in class struggles.

Emily Bates feels strongly that co-ops have the power to enrich the lives of our people—more particularly our women and children. She cites case histories to show how women have benefited by association with others in the cooperative movement. As her farewell word she says, "America is a democratic nation determined to find a means of raising the general standard of living. We seek to build a nation of people economically secure and at peace with the world. To this end, widespread development of cooperative enterprise by the people offers vast possibilities."

Recommendations for action, the Inquiry on Cooperatives submitted to the President separately from the report. These recommendations are as follows: (1) That there be made a survey of consumer and service cooperatives in the United States; (2) that an agency be established or designated to give information, research, and advisory service to consumers' cooperatives; (3) that steps be taken to assure consumer cooperatives credit parity.

POTATO PROBLEMS

[Continued from page 11]

selves were found. These associations maintained blacklists by which they cut off a dealer's supply of potatoes whenever he fell into the bad graces of the association. Such practices are illegal, and the information secured by the Federal Trade Commission was turned over to the Department of Justice for appropriate action.

To Congress' question, then, the Federal Trade Commission has made its answer. To what extent, Congress asked, are unfair, fraudulent, and injurious methods employed in the grading, warehousing, and distribution of farm products? Potatoes, the Federal Trade Commission has answered, were misgraded and misbranded in at least three cities. They were sometimes the subject of fraudulent claims for damages against railroads. They were the center of a racket in New York City, where they have been mishandled to the point of travesty. Some farmers in the South were charged, it was found, excessive prices for supplies necessary for their production and excessive interest rates to finance their production.

Not all of the 356 million bushels of potatoes grown and consumed in the United States in 1935 were subject to the abuses enumerated by the Federal Trade Commission. Most abuses were specific, occurred only in certain areas, and by no means applied to all potatoes. Abuses, when they occur, however, penalize honest dealers and shippers, farmers, and consumers.

How to eliminate these practices is something else. Misbranding and misgrading is punishable by law. Racketeering is illegal. The Farm Credit Administration exists to provide loans to farmers at reasonable interest rates. Plainly many existing evils could be corrected. To this end the Federal Trade Commission has recommended the prosecution of certain racketeers and certain associations of potato dealers, a recommendation which has now been partly effected. It recommends action by the Interstate Commerce Commission on the subject of fraudulent damage claims, and it points out to consumers that they should avail themselves of Federal laws against the misbranding and misgrading of commodities. Finally, for farmers, the Federal Trade Commission recommends the additional use of farm credit through the Farm Credit Administration and an increased resort to farm cooperatives.

For further information about potatoes, readers should refer to the article, "Facts for Potato Consumers", in the Consumers' Guide for February 10, 1936.

STUDY QUESTIONS FOR THIS ISSUE

1. Why does the AAA purchase potatoes?
2. What does the AAA do with the potatoes it purchases?
3. What are the Rochdale cooperative principles?
4. What are some of the differences between private business and cooperative business?
5. How much business are consumer cooperatives throughout the world credited with doing in a year?
6. In which European countries have they become important?
7. What are some of the achievements and shortcomings of consumer cooperatives in Europe?
8. What recommendations to the Government do the members of the Inquiry on Cooperative Enterprise make?
9. How many farms depend for their major income on the sale of potatoes?
10. In which months are consumers able to buy both "old" and "new" potatoes?
11. When are potatoes usually cheapest? When do they usually cost most?
12. What are some of the abuses in marketing potatoes which the Federal Trade Commission found?
13. How much did Idaho farmers get out of each dollar consumers spent for their potatoes, as reported by the Commission? How much did Maine farmers get?
14. What are the distinguishing marks of four varieties of sweet corn?
15. How can you distinguish at a glance sweet corn from field corn?
16. What food values does corn have?
17. In what ways can going without enough water hurt the body?
18. Does water supply enough minerals for a well-balanced diet?
19. Why is drinking a lot of water before meals not a good thing?
20. When should you not drink ice-cold water?

CONSUMERS' QUERIES AND COMMENTS

[Concluded from page 2]

tising. "Do I want to know what I am doing with the family money?" emphatically writes a Colorado consumer. "I'll say I do. I grew up on good honest cotton, silk, mohair, and wool. I know these fibers for what they can do in the matter of serving my needs. I don't know two whoops about rayon, and the tradesmen don't want me to know. . . . Being an ex-rancher, I know what it costs to produce dairy and poultry products and I don't try to gyp my neighbors who raise them for me, but I do buy when the output is large and place eggs in water-glass for winter use and would buy dried milk if I knew where to get it of reliable quality. . . . Before me is a can of lemon juice. I'd like to know if I'm paying for juice or water. . . ." A Pennsylvania consumer adds her vote for "more information on labels and for 'technical jargon'." "I favor grade labeling of canned goods", writes a Michigan consumer. "In fact", he adds, "such extensions of grade labeling as will enable consumers to buy common goods by specification." A California consumer says, "I want to get in on that poll. No; I don't care for technical jargon, but I *do* want technical information. Just plain facts, expressed numerically. . . . I want canned goods labeled with plain A, B, C labels, accompanied with a description that tells something—not just fancy pictures and superlative adjectives." "Some things", a Colorado consumer points out, "can't be described without technical language, and any consumer with a little effort can interpret or learn to. Facts of any sort are hard to find about products. It took us the issue of the Consumers' Guide last year to convince our butcher there was such a thing as U. S. graded meat. He *knew* we meant U. S. inspected. Clerks in our grocery stores can't tell contents even of packages, let alone quality. I am satisfied, as a shopper, with about 5 percent of the labels on goods I buy." . . . We can't report as fully on all replies, but we will continue to summarize new ones as they reach us from time to time.

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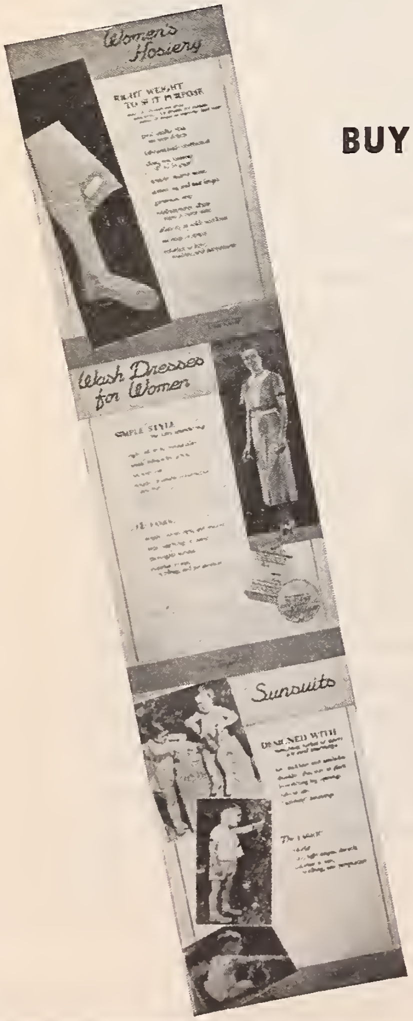

BUYING FACTS IN PICTURE FORM

You can get them in a set of nine Clothing Selection Charts, prepared by the Bureau of Home Economics. Tips on best-wearing fabrics, designs, and styles, told in words and pictures, cover; cloth coats for women; wash dresses for women; costume slips; women's hosiery; rompers for creeping babies; little girls' and boys' dresses and suits; winter play suits; sun suits. These charts are sold only in sets, at 40 cents, by the Superintendent of Documents, Government Printing Office, Washington, D. C.

U S GOVERNMENT PRINTING OFFICE 154645

CONSUMERS' Guide

VOLUME IV, NUMBER 9 JULY 26, 1937

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PICKING A WINNER

CONSUMERS' Guide

Issued every two weeks by the Consumers' Counsel, Agricultural Adjustment Administration, Department of Agriculture, Washington, D. C.

VOL. IV, No. 9 JULY 26, 1937

HOW one large city department store is working toward more and better buying information for consumers on labels and in advertising is recounted in a recent issue of a trade journal. First, this notice was sent to merchandise managers and buyers: "We believe that our customers are entitled to more complete information than we are now able to give concerning many articles which we sell. With that object in view, you are directed when buying merchandise to request your resources to correctly describe the fabric and content of the material and to enter this description plainly on your order in each and every instance."

Next the store checked up on the content facts given on signs throughout the store, and sent orders to all copywriters: (1) Insist that buyers requesting advertising give "complete information regarding the fabric, wood, metal, or any other material of which the item is made"; (2) never use words like "crepe", "satin", "taffeta" without qualifying fabric nouns; (3) "write your copy so clearly that there CAN BE NO question in the mind of the reader as to what the material is in the product"; (4) never use an asterisk to qualify a "word, phrase, or thought in an advertisement."

Third, the store wrote to its "resources", the firms from which it makes its purchases: "For a long time we have not been satisfied with the information we have been giving our customers about the goods we sell. We have answered questions about the washability and other qualities of the merchandise, often without ourselves feeling entirely confident in the information we were giving. Often we could not even say with certainty what fibers went into the making of a piece of merchandise; how much silk, wool, cotton, rayon, celanese, bemberg, or other fabrics. Like other stores, we have made certain laboratory tests, but it is obviously impossible for a retail store to do this with the thousands of units that it handles. It seems clear that this information should originate where the merchandise originates. . . . We would appreciate your cooperation with us by supplying this information in the form of a tag or label attached to the goods or the container, or, where that is impracticable, then on the invoice."

Replies like these came back from some of the manufacturers: "In some fabrics, the mere naming of fiber content means nothing—some method of denoting *quality* must be worked out." . . . "There are too many materials used in the manufacturing (of one line of merchandise) to permit intelligent content description or tagging." . . . "Not enough stores have requested labeling of merchandise to justify the expense." Undaunted by the many problems along the route to informative labeling, this department store intends to continue to press its campaign.

FROM Detroit, Mich., comes a bundle of consumer questions about sugar: "What are the different stages of processing raw sugar into white?" "Why *white* sugar at all? Is it a *dead* food?" "Brown sugar costs more than white, yet it has less processing. Why so high?"

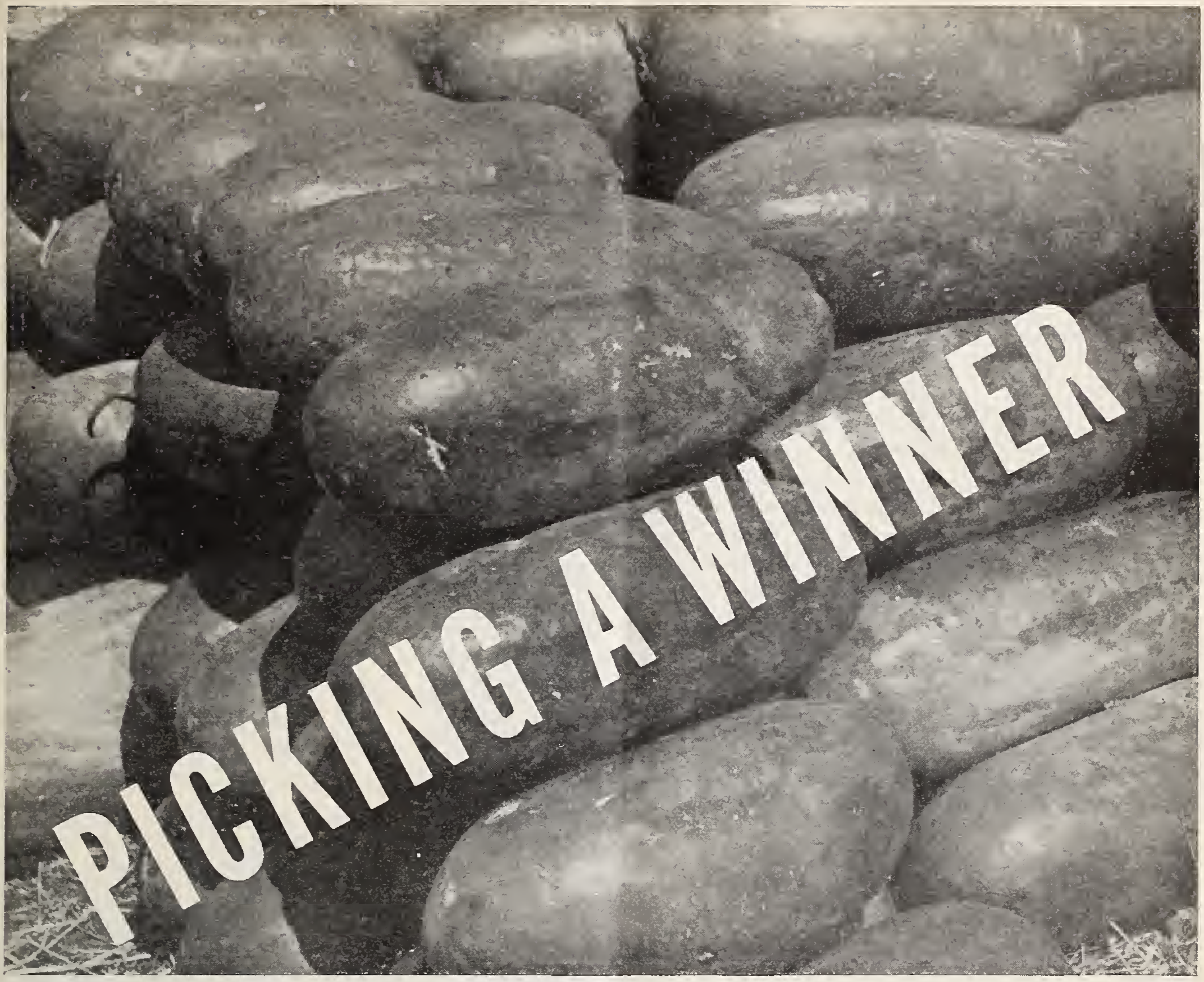
First, to the question of manufacture. There are five operations involved in transforming sugarcane into raw sugar. In operation No. 1 the juice is extracted from the cane by means of crushers. Second, this juice is purified by adding lime and heating; third, it is evaporated until it becomes sirup; fourth, this sirup is brought to a point where crystals form; fifth, these crystals are separated by centrifugal force from the mother liquid that is molasses.

Most of the resulting raw sugar goes to the refinery to be converted into white sugar. A small amount is packaged and sold to consumers as one type of brown sugar. Health food shops often display this kind. Raw sugar is about 97 percent pure sugar, or sucrose to give it another name. The rest consists of moisture, mineral salts, and nonsugar substances that were derived from the cane juice.

Refining removes even more of the molasses, the coloring matter, and whatever other nonsugar impurities are present. Hence this process whitens the sugar. Briefly, this is what happens at the refinery: The sugar crystals are washed and dissolved. Then sodium carbonate is added as neutralizer, if the raw sugar is acid. Next comes filtering with the help of an insoluble filter aid. Bone charcoal then plays its part in absorbing color and nonsugar impurities. Result—the amber sugar sirup changes to a clear water-white liquor. Boiling this liquor brings about the crystallization of pure white sugar—a product that runs about 99.9 percent sucrose.

Now consider the brown sugar usually found in commerce. Contrary to opinion, this brown sugar is a product of the *refinery*. After three or four boilings, the water-white liquor becomes colored again, no longer yields white crystal. Further crystallizations give yellow to dark-brown sugars. These brown sugars consumers generally buy for their Christmas baking, or whenever they want the characteristic brown-

[Concluded on page 18]



PICKING A WINNER

With watermelons, it's bigness that counts. Knowing types, seasons, and how to spot a ripe one helps, too, in getting your money's worth of this important summer diversion

About this time of year farmers traditionally load their shotguns with rock salt, stand ready to let fly at young marauders. For watermelons are in their prime, and thoughts of luscious pink watermelon slices lure small boys to raid the nearest watermelon patch. Most consumers will get their melons in more orthodox manner at the market. There they will thump and thumb melons of various colors, shapes and sizes—the Watsons, Thurmond Grays, Wondermelons. These are good shippers, coming long distances by rail to compete with local products such as Cuban Queen, frequently grown for nearby marketing. Cuban Queen is a round, medium-sized fruit with light-green mottled rind.

Top-price seller all over the country is the Tom Watson, a large cylindrical watermelon with deep-green, faintly veined skin. Flesh is red, firm, and somewhat coarse in texture. Popular though they were, the original Watson strains were open to complaint on account of a hard white streak that sometimes ran through the flesh. This fault, however, has been bred out in such newcomers to the family as Gilbert's Cut-Red Watson, a big glossy melon that is fine eating from start to finish.

Thurmond Gray wins honors as another melon success—quite different in appearance from the Watsons. Its rind is a light grayish green in color and is thin but tough. The delectable dark-red flesh is stringless, fine grained, and tender. Because of its firmness, the melon stands long train trips well. Like the Watson, the Thurmond Gray runs around 30 or 40 pounds.

Leading commercial watermelon of the round type is the Stone Mountain or Dixie Belle, its names suggesting the hearty reception accorded it in the South. The Dixie Belle matures to an ideal size and produces prolifically. The green fruit rind covers a tender melting flesh of showy bright scarlet hue.

Growers focus interest on a new watermelon strain that has been developed to resist the watermelon's worst enemy—watermelon wilt disease. Already one of these melons, Pride of Muscatine, has been boosted for commercial watermelon growing. It has dark-green, thick rind and crisp, tender, red flesh. Pride of Muscatine has the long cylindrical body that has outstripped in popularity the oval shape generally preferred a few seasons ago.

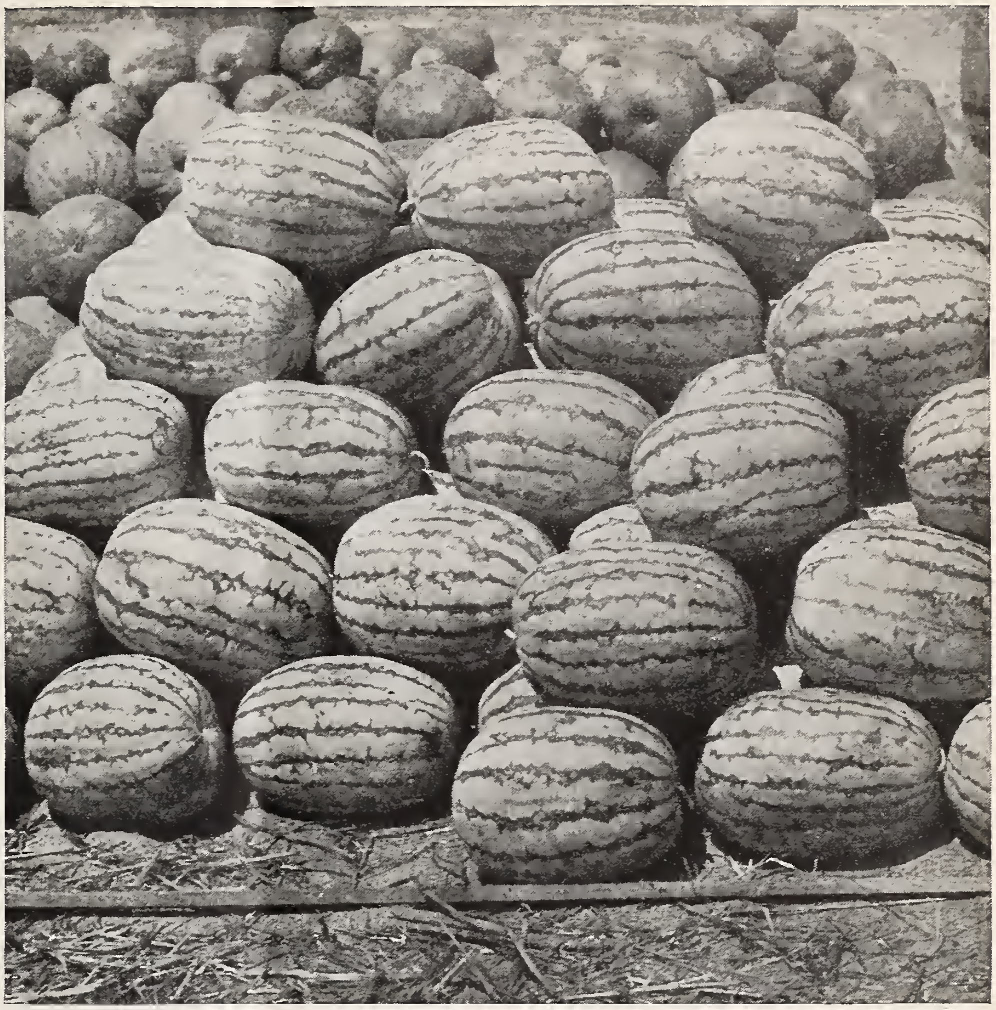
Just when consumers begin to think that watermelon season is over, a late comer makes its debut at the grocer's—a small round melon grown in Colorado and California and sold under a number of noms de guerre—Winter Queen, Winter King, Alaska, Klondike. Quality is only medium, but the melon keeps well, and on that account is a decided addition to the melon family.

We are apt to think of watermelons as a native plant. Certainly we associate borsch or beets, rather than watermelons, with Russia, but it was the Russians emigrating from the Volga River section who introduced their prized watermelon strains—including this round-melon type—in the Rocky Ford district of Colorado.

Watermelons grow over a wide range of territory, but though they reach as far north as Michigan and Minnesota, over 90 percent of the volume shipped comes from below the 37th parallel. That gives the southern part of the United States an unbeatable lead in production, with Georgia stealing the show with its annual crop of 12 million melons. Eastern Texas, the Imperial Valley and central California, Florida, South and North Carolina, Virginia, and Missouri record large volume watermelon production, with 14 other States also heard from.

Florida and the Imperial Valley commence the watermelon season in May, with Texas hot on their heels. Their shipments are heaviest in June when Georgia starts shipping.

Southern growers plant watermelons on newly cleared land, since such soil contains abundant plant food, withstands dry weather well. Moreover, the likelihood is that new land won't carry disease to melon crops. These watermelons and those on page 3 are the popular Watsons.



Consumers appreciate the crisp flesh and luscious flavor of the Cuban Queen, round to oval in shape, with a rind striped light and dark green.

As warm weather creeps northward, watermelon season keeps pace with it. July is the peak month for watermelon production, but northernmost States may see the last of the melon shipments in October. With the eastern States out of the way, California and Colorado then hold the field alone, continuing to send melons to market until Christmas.

Total acreage in all States in 1936 stood at 256,600. Watermelon growers produced 63,300,000 melons, although this number included many left unharvested because of unfavorable market conditions. Farm value came to approximately $8,000,000—highest since 1930.

Making sure of good watermelons in the market basket isn't a matter of snap judgment. Professional graders from long experience can choose melons by eye alone. Consumers need extra aids. Some consumers rely on the old-fashioned test for ripeness—thumping the melon and listening for the dull, hollow sound that is supposed to indicate the right state of maturity. This test is not dependable, however, since the mature melon may be "dead ripe" or stale. Then the flesh would more than likely be relatively dry and mealy. Safety lies in having the melon plugged so that consumers can see and taste for themselves.

Sweetness and delicacy of flavor are the things to look for in melons. These are best when the fruit is fully mature, irrespective of shape of the melon or color of the seed. Ripe melons of good quality are usually firm, symmetrical, and of a good color—varying according to variety from gray to dark green. The fruit should have a bloom over the surface that gives the rind a velvety appearance. For full ripeness, the lower side of the melon where it rested upon the ground should be yellowish white. Melons that measure up to these requirements will more than likely have crisp, juicy flesh.

With watermelons bigness counts. Choose a big melon because it will usually be more symmetrical and have more heart that is free from seed.

Avoid melons that have worm injury showing itself in healed-over punctures. Grooves often extend from these perforations into the flesh. Watch out for decay too. Oftenest this appears at the stem end as discoloration and softening. Many growers paint the freshly cut stems with a bluish paste of starch and copper sulphate to prevent the development of the stem-end rot. Decay puts in an appearance at the blossom end as a flattened, leathery spot about the size of a silver dollar. Should dark, watery spots appear on the rind, don't discard the fruit as long as this type of decay hasn't penetrated the surface.

Some watermelons have a hard white streak running lengthwise through the flesh. Such melons aren't the ones to take home for dinner, but how to tell these melons is a question that hasn't been solved except by actually cutting through the melon.

The United States Department of Agriculture has defined quality standards for watermelons as for many other fruits and vegetables. However, these grades, U. S. No. 1, U. S. No. 2, and Unclassified, with their quality, size, and shape requirements, are of more use to the trade than to the consumer, since no mark appears on the melons.

Consumers are right in thinking of watermelon as an ideal hot-weather food—short on calories and long on thirst-quenching properties. Watermelon is over 90 percent water—a water pleasingly flavored with natural sugar. Watermelons rate only fair for each of the Vitamins A, B, C, G. They score only poor to fair when it comes to minerals. But there is this cheering note—vitamin values are based on weight. An ounce of watermelon may not give consumers as much vitamin content as an ounce of strawberries, but no consumer stops with an ounce of watermelon. He finishes off a plate-size slab to ask for more.

Just because watermelons are easy to eat doesn't mean that they are easy to market. Growers and shippers can tell a tale of marketing risks and misfortunes that would make consumers wonder why they have melons at all.

Overproduction is the factor that has knocked marketing into a cocked hat, sent prices to farmers on the toboggan to ruinously low levels. Too often the market news service in large cities gives the report about watermelons, "On track 100, unloads 30"—showing that markets are glutted, since watermelon carloads are piling up at railroad terminals three times as fast as they are being sold.

Always to be reckoned with in marketing watermelons is the matter of the weather. Hot weather jacks up watermelon demand. But it may not be until well along in July that a heat wave will make consumers take off their coats, mop their brows, and order a refreshing slice of crisp watermelon. The rest of the time melons may go begging for buyers.

Another complicating factor in the marketing picture is consumer income. When consumer budgets are big they include so-called luxury foods, watermelons among them. At such times consumers are willing to pay good prices and farmers are content. But let a depression flatten pocketbooks and consumers strike melons off the market list.

Figures point up these problems. When "prosperity" was hitting on all cylinders in 1929, farmers produced 80 million melons, received $170 per thousand. Encouraged, farmers expanded production—disastrously, as it turned out; for the depression year of 1930 brought a sharp drop in consumer incomes, reflected in low prices of $116 to farmers. As a result, 5,500,000 melons were left unharvested. 1931 and 1932 were bad years, too. Although acreage had been reduced in 1932, prices received by growers were averaging only $80 per thousand—lowest price on record. As a drastic measure farmers cut acreage 20 percent. Since then business has recovered to a certain extent, and with it watermelon fortunes. Acreage is again expanding, although, as in 1935, farmers are apt to be unduly optimistic, increasing acreage too rapidly for their own good, with consequent glutting of markets, and thousands of melons left in the fields to rot. Because acreage was reduced about 6 percent in 1936, prices snapped back to $128 per thousand melons.

When there is danger that markets may be glutted, the marketing agreements sponsored by the Agricultural Adjustment Administration help out—their aim is to strengthen prices by regulating interstate shipments of various products. In the case of watermelons, such an agreement has been in force for 3 years in Florida, South Carolina, North Carolina, and Georgia. These four States dominate markets east of the Mississippi during their season from May to September.

The marketing agreement now in effect provides for periodic regulation by grade or size to keep inferior melons off the market, and to halt shipments for periods not to exceed 48 hours, holding back melons from markets that are oversupplied. Twice during the summer in 1936 shipments were restricted. So successful was the agreement in that year that it was given credit for being an important factor in raising the average price received by growers in those States to a level 92 percent higher than that in the previous season.

Around July 4, watermelon shipments usually need to be suspended—and have been in certain regions in the last two seasons. At that time growers become overoptimistic in anticipating holiday trade, and send to market more carloads of watermelons than can be disposed of. Consequently prices drop sharply. Watermelon history repeated itself this year. On June 26, market quotations gave price averages as $219 a car. By June 29, these had sunk to $100 per car. To right matters, the Secretary of Agriculture authorized the holding back of shipments. That is, shipments of watermelons from Florida, Georgia, South Carolina, and North Carolina were stopped for 48 hours.

Though profits on watermelons are low, watermelons are a cheap crop to produce. Watermelon culture demands well-drained, warm soil, capable of being worked early in the spring. Growers plant from February in Florida to May in the North. To avoid possibility of loss from frost, a second seeding often follows shortly after the first. During the growing period, farmers

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MORE ABOUT MINERALS

There's only a penny's weight of iron in the average body, but it plays a major part in making bodies good working and playing machines*

Important work which minerals do for us in building good red blood, firm bones, muscles, and teeth, and in regulating and coordinating all our complicated body processes, is way out of proportion to the minute amounts we require.

Scientists do not know as yet the exact quantity of every mineral existent in the normal human body. They do know that the minerals—calcium, phosphorus, iron, potassium, sulphur, sodium, chlorine, magnesium, iodine, manganese, and copper—are essential to us, and that we depend upon food for our supply of these minerals.

Out of this long list star three—calcium, phosphorus, and iron. If your diet provides food which gives you your quota of these three, it is more than likely that it will also have required amounts of the other necessary minerals. For the importance of calcium in the diet, and foods rich in calcium, see "Bone Builder No. 1", Consumers' Guide, October 19, 1936; for phosphorus, "Bone Builder No. 2", Consumers' Guide, November 2, 1936.

Green-colored vegetables, fruit, some meats, whole grains, and milk are the reliable sources for most minerals. Milk is a four-star source for both calcium and phosphorus. If a child has a deficit of these two elements, more milk per day is the best prescription. Milk is often called a "foundation food" as it provides some of every food element which we need. However, its supply of some elements is more generous than others. Though iron is present in milk, it is not present in sufficient amounts for us to rely on it for all the iron we need for blood building.

Experimental studies of rats fed on a milk diet have shown that they developed normally for from 4 to 6 weeks and then stopped growing. Some died; some developed anemia—a condition in which the blood is lacking in red corpuscles. When foods with a higher content of iron and containing some copper were given them, the sick rats rapidly improved. The function of copper in building blood is not completely understood, but copper seems to aid the body in the utilization of iron. The tiny bit of copper we need, however, does not need to concern us seriously, for it is present in most green vegetables, fruits, cereals, and meats, and often it is added to our food through modern methods of processing food. Copper is present in milk when it is pasteurized by being passed over heated copper rollers.

The iron we get in food is first absorbed from the intestines. Before it does any work for us, however, it must be combined with other substances to form a compound called hemoglobin. This change takes place chiefly in the bone marrow. Hemoglobin is an intrinsic part of each one of the trillions of red blood corpuscles which carry oxygen to the innermost cells of every organ and tissue and carry away the waste product, carbon dioxide. But iron is not only present in the red corpuscles. It is an essential part of every living cell in our body and helps to carry on the vital functions of the cell. The amount of iron a normal person has in his body equals the weight of a penny, or less than one-tenth of an ounce. Nevertheless, the importance of the work it does for us cannot be overemphasized.

At birth, nature gives us a running start on iron. The percentage of iron in an infant's body is three times greater than that of an adult. His reserve supply tides the baby over the first few months when he is on a liquid diet. Then if he is to grow into an energetic child, it is necessary to add food containing iron to his diet.

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*Other special articles in this nutrition series have been published in these issues: Apr. 20, May 18, June 15, June 29, July 27, Oct. 19, and Nov. 2, 1936, and July 12, 1937.

Growing children and adults cannot store iron in their bodies to use during an emergency as they do the fuel food, fat. We draw upon our iron supply every day. Therefore, to maintain our iron equilibrium we should eat some foods rich in iron every day. Scientific studies have shown that for individuals the iron requirement varies from 6 to 16 milligrams a day and that the desirable allowance for both the adult and growing child is 15 milligrams, or 5 ten-thousandths of an ounce per day.

Iron is present in many foods. Whole-grain cereals are a source of iron and one that gives us many energy-yielding calories as well. When food money is limited and one must select foods carefully to get double value for each penny spent, whole bran and oatmeal offer an economical source for part of one's daily quota of iron. Liver, kidney, brains, and the head of meat animals top the list as iron sources. The lean muscles of beef, veal, lamb, pork, and the dark meat of poultry are very good. Green leaves of vegetables, which add vitamins to the diet, too, are a rich source. Egg yolks, oysters, and shrimps contain iron. However, the amount of iron in each of these foods is relatively so small that we would have to eat more than a normal portion of any one of them to get our necessary quota at one meal. For instance, to get your 5 ten-thousandths of an ounce of iron from spinach alone, you would have to eat 2½ cups of it; of egg yolks, about a dozen; of baked beans or lean beef, more than a pound. When we eat canned fruits and vegetables we are apt to increase our intake of iron. Experiments have shown that these products absorb some iron from the can. Pureed prunes canned in glass had an iron content of 0.0011 percent. A similar product in a tin container had from 0.0031 to 0.0052 percent. It is best not to depend on iron absorbed by canned foods as a source. The secret of getting enough iron day by day is to eat many different foods containing it.

FOODS RICH IN IRON

ANIMAL FOODS

Egg Yolks

Meats
- liver
- kidney
- brain
- heart
- also lean muscle of beef
- veal
- pork
- lamb
- and dark meat of poultry

Fish
- oysters
- shrimp

VEGETABLE FOODS

Green Leaves
- turnip
- beet tops
- chard
- dandelion
- mustard greens
- watercress
- spinach
- kale
- New Zealand spinach
- broccoli leaves

Dried Fruits
- apricots
- peaches
- currants
- dates
- figs
- prunes
- raisins

Whole Grain Flours or Cereals
- wheat
- barley
- rye
- oats

Sirups
- molasses
- sorghum
- cane sirups

Legumes, Either Fresh or Dried Seeds
- limas
- lentils
- common or kidney beans
- cowpeas
- soybeans
- common peas

Nuts, Unblanched
- almonds
- hazelnuts
- walnuts
- pecans
- hickory nuts

COOPERATION

Consumers and farmers in the business of supplying their needs cooperatively report developments in seven States

GENERAL—"Cooperatives must learn to cooperate" was the theme of the American Institute of Cooperation held June 21–25 at Iowa State College in Ames, Iowa. More than a thousand cooperative leaders, representing marketing and purchasing cooperatives in 32 States, considered the relationship between marketing and consumers' cooperatives. Stressing the importance of the cooperative purchasing movement, one speaker pointed out that four co-ops which purchased only a million dollars' worth of commodities in 1920 expanded purchases by 1937 to 29 million dollars. Two new trends point to the coming maturity of cooperatives in America: The formation of federations of cooperatives extending from coast to coast, including both rural and urban cooperatives, and the resolve of more purchasing cooperatives to go into the business of production. Sounding a warning, one speaker pointed out that in Great Britain misunderstandings over definitions were keeping consumer and farm cooperatives separated. . . . Cooperative education leaders from America's major consumers' cooperatives met at Grand View College, Des Moines, Iowa, June 18–20, to take stock of consumer education. Education directors and editors discussed ways of promoting cooperative education, the cooperative press, and cooperative recreation. Illustrating the discussions on cooperative recreation, students from the National Cooperative Recreation School gave an exhibition of plays, folk games, and folk dances.

REPRESENTATIVES from California's Fruit Growers Exchange reported that its members now produce 85 percent of all California citrus fruits, operate 200 canning factories. The exchange supplies cooperators with trained picking crews and equipment, traveling spraying and insect-control squads, traveling pruning crews. It maintains soil-testing laboratories and operates a fruit supply service. . . . From New England came a report that the Eastern States Farmers Exchange now has 70,000 farmer members and annual sales of 25 million dollars. . . . Tenant farming provokes problems for cooperative creameries. To meet them some creameries have lowered membership fees and arranged to refund fees when the tenant cooperator moves on.

NATIONAL Cooperatives, Inc., has decided to apply voltage to the distribution of electrical appliances. Approximately 1,000 retail cooperatives in 21 States are served by the 11 cooperative wholesale associations affiliated with this national organization. These associations include the Central Cooperative Wholesale, Superior, Wis.; Consumers' Cooperative Association, North Kansas City, Mo.; Midland Cooperative Wholesale, Minneapolis, Minn.; Farmers' Union Central Exchange, St. Paul, Minn.; Ohio Farm Bureau Cooperative Association, Columbus, Ohio; Indiana Farm Bureau Cooperative Association, Indianapolis, Ind.; Farm Bureau Services, Lansing, Mich.; Pennsylvania Farm Bureau Cooperative Association, Harrisburg, Pa.; Consumers' Cooperatives Associated, Amarillo, Tex.; Pacific Supply Cooperative, Walla Walla, Wash.; and Eastern Cooperative Wholesale, New York City, N. Y. National Cooperatives is now distributing a long line of electrical appliances, beginning with refrigerators and going right through a list of appliances: ranges, washing machines, radios, vacuum cleaners, milkers, cooling tanks, lamps, fans, toasters, roasters, grills, and a host of small electrical gadgets. Four electrical shows have been held so far in co-op centers, Columbus, Ohio; Kansas City, Mo.; Chicago; and Minneapolis. All cooperative wholesale members now stock these appliances which are sold at current market prices. Purchasers who are cooperative members get their savings in patronage dividends. To help consumers who must buy "on time", National Cooperatives hopes that the sale of electrical appliances will be financed through credit unions.

ILLINOIS.—Chicago summaries of co-op activities total up to a modest figure. There are now 6,100 members of various cooperative businesses in the Chicago area. These co-ops employ 139 persons, do an estimated business of $1,485,000 a year, $4,800 a day.

INDIANA.—Rural credit unions now operate in about 40 Indiana counties. Leading the State is the credit union in Noble County. Since its organization 5 years ago, it has loaned members $105,839. It now has 566 members with shares valued at $35,000. Outstanding loans total $30,747, an average of about $200.

Interest rates on loans are 7 percent annually, and at the end of the year shareholders receive in dividends 4 percent on their shares. Loans are made for a variety of purposes: To pay taxes, to meet medical expenses, hospital and doctor bills, to buy farm equipment.

IOWA.—Dying is often a burden on the living. To lighten one of the burdens of death from the backs of those who must carry on, cooperators met in Pella, Iowa, in 1929 to consider what could be done about the high cost of funeral services and caskets. Results of their activities are apparent today in the Iowa State Federation of Burial Associations, with its 10-member burial societies. Largest of the societies is the Pella Cooperative Burial Society with 869 members. On the basis of Iowa cooperators' experience a burial society needs 500 members with an investment of $5,000 to start such a cooperative. Yearly budget for such a society contemplates expenses amounting to $3,750, including the salary of a licensed embalmer and rent. Income from an estimated 50 burials would be $3,750, or $75 a funeral.

MICHIGAN.—Leadership can't be left to chance if cooperatives are to go on. One hundred farm youths are to receive training for leadership at the Michigan Farm Bureau's Rural Young Peoples Leadership Training Conference at Waldenwoods Camp, near Hartford, Mich., August 29 to September 4. Training in publicity methods will be gained from the publication of a daily camp paper . . . "Shall farmers take up with city consumer cooperatives?" asks the Michigan Farm Bureau paper, which goes on to answer its own question: "It would be best for farm cooperatives to use their efforts and resources to develop and strengthen their own organization rather than dissipating the farmers' money and personnel in furthering urban cooperative movements . . ." The other side of this argument was stated at Ames, Iowa, where the annual meeting of the American Institute of Cooperation was held. Said one speaker, "There is need for greater unity in the cooperative ranks and for recognition that organizations of both buyers and sellers are alike attempts to diminish the wastes of distribution and to organize those processes in the interests of the broad masses of the people." Speaking directly to marketing cooperatives, another speaker urged them to "explore the newer and more constructive devices for enlarging the market and expanding their field of activity in the service of the consumer."

Here is an example of a consumers' co-op which, in order to increase the income of its members, went into producers' co-op activity. The cheese factory started by a cooperative retail store at Pelkie, Mich., a few years ago is now running night and day; 58,565 pounds were made in April. Also, the co-op has sold five tractors this spring, and two to three cars of farm machinery were sold in April. The store is hustling, too, April volume having been $15,994 as compared with $8,554 in the previous April.

MINNESOTA.—America's first cooperative oil wholesale closed its tenth year of business with 10 times the volume of its first year. Midland Cooperative Wholesale, with headquarters at Minneapolis, began in 1927 with 37 member cooperatives and a business of $269,000. Today it is serving 160 member cooperatives and has an annual business of $3,000,000. During the last year, Midland opened a branch warehouse and compounding plant in Milwaukee; added electrical appliances to the list of commodities it distributes; increased its membership by 19 retail co-ops; joined two other co-op wholesales; and contracted for the output of an oil refinery in Oklahoma. Savings last year totaled $71,500. Of this, $48,000 was returned in dividends to member co-ops; $15,000 went into reserves.

Can an oil cooperative successfully expand into the grocery field, was the question Cambridge, Minn., cooperators asked themselves 5 years ago. Now the Isanti County Cooperative Association of Cambridge points to its own record to prove such things are possible. Cambridge is a town of 1,200 persons in a small farming county with a population of 12,000 persons. In this small community, the co-op distributed $214,000 worth of merchandise in 1936. On this they saved $22,500. In 4 years and 5 months the co-op sold its members $559,000, saved them $68,000. Assets in the same period grew from $1,800 to $56,000. Employees have been sent to summer camps and training schools. The Women's Guild has carried on educational work in Cambridge itself. Present project is a credit union. Organized only a few months ago, it already has 126 members, shares add up to $4,627, loans to 55 borrowers total $4,422.

MISSOURI.—Cooperation around the world takes on tangible meaning in the light of a bulletin from the Consumers' Cooperative Association oil plant in North Kansas City, Mo. Oil is now being shipped from this plant to cooperatives in France, Scotland, Belgium, and Estonia. Furthering cooperation between national groups, the Consumers' Cooperative Association is sending a delegate to the International Cooperative Alliance meetings in Paris, September 6–9, where proposed International Cooperative Oil Wholesale will be discussed.

NEW YORK.—Beginning with a housing project, the two largest American housing cooperatives, Amalgamated Housing Corporation and Amalgamated Dwellings, have now gone on to establish their own electric cooperative right in the center of New York City. Until this year electricity was purchased wholesale and distributed cooperatively to members. When the public service commission abolished this arrangement the cooperative purchased a $70,000 Diesel plant. Now in operation, the plant is expected to save members about $20,000 a year on their electric bills. These savings, if effected, added to rent dividends, which totaled $30,000 in 1936, and dividends from the cooperative commissary, reaching $7,500 in the same year, provide a sizeable argument for cooperation to the 800 member families.

Taking a leaf out of the lessons of the European cooperatives, the Consumer Cooperative Services of New York City, which operates 10 cooperative cafeterias, voted to pay its employees 10 percent above the average hourly rate specified in the 10 best wage contracts the Cafeteria Workers Union has with other employers. This is the same formula most European cooperatives follow in their relationships with employees.

Eastern Cooperative Wholesale, with headquarters in New York City, reports progress. Formed only a year ago to pool the orders of 30 retail co-ops, it now serves 157 retail cooperative outlets, distributes 155 products under the "Co-op" label. For the first 4 months of 1937 it had a total business of $161,000, an 86-percent gain over last year.

Consumers' BOOKSHELF

More sources of information for students of consumer problems on how to select wisely and economically household necessities*

DENTIFRICES MOUTHWASHES

Common Sense in Mouth Hygiene, by William M. Gardner. 1926, pp. 18, illustrated. Address: American Medical Association, 535 North Dearborn Street, Chicago, Ill. 15 cents. Discusses the selection and proper use of toothbrushes, dentifrices, and mouthwashes.

"Doctor, What Dentifrices Do You Recommend?" by Council on Dental Therapeutics. March 1937, pp. 9, mimeographed. Address: Council on Dental Therapeutics, American Dental Association, Chicago, Ill. 3-cent stamp. Gives the standards set up by the Council on Dental Therapeutics for approved dentifrices. Discusses the advertising claims of a number of tooth powders and tooth pastes and includes a list of those approved by the Council.

DINNERWARE

The Selection of Dinnerware for the Home, by Arthur S. Watts. Engineering Experiment Station Circular No. 21. Second revised edition November 1936, pp. 16. Address: Engineering Experiment Station, Ohio State University, Columbus, Ohio. 5 cents. Defines and discusses the properties of earthenware, china, and porcelain. Also considers the decoration, comparative cost, grades, and common faults of the various kinds of dinnerware.

DISINFECTANTS

Some Common Disinfectants, by M. Doreet, U. S. Bureau of Animal Industry. Farmers' Bulletin No. 926. March 1918, revised May 1931, pp. 10. Address: Superintendent of Documents, Washington, D. C. 5 cents. Distinguishes between the terms, disinfectant, antiseptic, insecticide, and deodorant. Discusses the values and limitations of 10 common disinfectants used about the household and the farm.

DRAINPIPE CLEANERS

Drainpipe Cleaners or Solvents. Letter Circular LC–341. August 1, 1932, pp. 2, mimeographed.

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*Thirteenth installment of our consumer bibliography. The twelfth appeared in the May 17 issue.

Address: National Bureau of Standards, U. S. Department of Commerce, Washington, D. C. Free. Mentions several common chemical compounds which may be used as drainpipe cleaners and discusses the chemical action that results from their use.

GARDEN EQUIPMENT

Selection and Care of Garden Hose, by P. L. Wormley and W. L. Holt, National Bureau of Standards. Circular C327. April 20, 1927, pp. 12. Address: Superintendent of Documents, Washington, D. C. 10 cents.

INKS

Inks, by C. E. Waters, National Bureau of Standards. Circular C413. December 28, 1936, pp. 54. Address: Superintendent of Documents, Washington, D. C. 10 cents. [A technical bulletin describing different types of inks and the uses for which they are best adapted.]

JEWELRY

Facts You Should Know About Jewelry, by Boston Better Business Bureau, Inc. 1936, pp. 12. Address: National Better Business Bureau, Inc., Chrysler Building, New York, N. Y. 5 cents. Gives general suggestions for buying watches, clocks, silverware. Includes a section on the care of jewelry.

LEATHER

American Leathers. 1929, pp. 128, illustrated. Address: Tanners' Council of America, 100 Gold Street, New York, N. Y. 50 cents. Describes the parts of a shoe. Tells how leather is tanned and finished and describes the sources and uses of the following types of leather: calf, cowhide, patent, kid, sheep, reptile, buckskin, shark, horsehide, ostrich, kangaroo, pigskin, and seal. Includes a 3-page bibliography.

Dictionary of Leather Terminology. Second edition. 1936, pp. 22. Address: Tanners' Council of America, 100 Gold Street, New York, N. Y. 10 cents. This pamphlet, "dedicated to the public in the interest of truth in merchandising", lists leathers according to their origin and defines terms of general use in the leather industry.

Leather: Questions and Answers, prepared for Retailers' Testing League. L–46. 1936, pp. 4, mimeographed. Address: United States Testing Co., Inc., 1415 Park Avenue, Hoboken. N. J. 20 cents. A highly technical bulletin giving information on the physical structure of leather, changes occurring in leather during the manufacturing process, and the different characteristics of horse, sheep, pig, shark, and salmon skin.

LUMBER

Choosing Woods for Floors, by Charlotte P. Brooks. Brieflet No. 455. December 1936, pp. 3, diagrams, mimeographed: Address: Extension Service, University of Vermont, Burlington, Vt. Free. Brief statement of the advantages and disadvantages of each of the common woods for use as flooring materials.

Floors and Floor Coverings, by U. S. Bureau of Home Economics. Farmers' Bulletin No. 1219. September 1921, pp. 30, illustrated. Address: Superintendent of Documents, Washington, D. C. 5 cents. A section of this bulletin discusses woods suitable for flooring.

Grade Marking of Lumber for the Consumers' Protection, by National Committee on Wood Utilization. Report No. 5. 1928, pp. 14. Address: Superintendent of Documents, Washington, D. C. 10 cents. Presents existing methods of lumber grading and points out the advantages of extending grade marking to all lumber products.

How Lumber Is Graded, by U. S. Forest Service. Department Circular 64. 1933, pp. 48. Address: Superintendent of Documents, Washington, D. C. 5 cents. Gives lumber grades used by various lumber producing associations.

Selection of Lumber for Farm and Home Building, by C. V. Sweet and R. P. A. Johnson, U. S. Forest Service. Farmers' Bulletin No. 1756. April 1936, pp. 46, illustrated. Address: Superintendent of Documents, Washington, D. C. 5 cents. "This publication is intended to aid all who want to acquire a basis for independent judgment of the wood they are buying." Classifies wood according (1) to principal farm and home uses, and (2) to properties of wood such as hardness, weight, freedom from warping, ease of working, paint-holding power, decay resistance, toughness, etc. Discusses important points to consider in construction and maintenance work, and gives lumber grades and sizes.

Squash ON THE MENU

Yellow Summer Crookneck is generally called a squash, though botanically a pumpkin. Note the ridged fruit stem characteristic of the true pumpkins.

Summer brings its special types to add flavor and variety to moderate-priced diets

WHENEVER a Puerto Rican girl wants to turn down a suitor, she calls him a calabaza—a squash. That the squash should be chosen as a term of opprobrium seems unjust, for this humble vegetable has much to recommend it. Like the pumpkin, which it closely resembles in many ways—in fact, many so-called squashes botanically are pumpkins—squash is a nutritious food. It can appear at the dinner table in a number of guises; in soups, muffins, pies, or as a vegetable. If properly stored, certain types of squash and pumpkin can be counted on for a fresh vegetable supply from midsummer to winter.

Pumpkins and squashes—both members of the genus *cucurbita*—are among the food plants that are natives of America. Indians grew them long before the white man put foot on these shores. In fact, the name *squash* is adapted from an Indian word meaning "eaten green." Now these crops have reached the status of big business. Commercial production of squash in the United States covers some 10,000 acres; crop value reaches over the million dollar mark. Massachusetts, California, New York, and Michigan usually lead the field in production. Pumpkin acreage for commercial production is around 4,000 acres; crop value, some $175,000. Champion States are California, Iowa, New York, and New Jersey.

Squashes come in two types, the summer and the winter, differing in character and habits of growth. The summer or bush squashes take less space in growing than their winter relatives which sprawl over the fields. Between them the two types cover a wide range of flavor, some being sweet and nutty, some mild, others strong in flavor like the pumpkin.

Excellent at this time of year and well into early autumn are the

Pumpkins can be grown profitably and picturesquely in the shade of some tall-growing plant, such as corn. . . . Shelves such as these (below) make excellent storage places for hard-shelled squash.

Bush Scallops and Crooknecks, two kinds of summer squash found in most markets.

Bush Scallops, or Pattypans, travel under still another name in the South—Cymling. The word Pattypan accurately pictures this popular summer squash with its disk shape and scalloped edge. Earliest maturing of the squashes, the Pattypans come in white- or yellow-skinned strains. Preference points to the white, which has a smooth pale-green skin and milky, firm flesh. Pattypans may vary from button to pie-tin size.

Long, curved necks and more or less rough rinds characterize the Crooknecks. Favorite among these is Yellow Summer Crookneck, its yellow warted skin covering tender cream-colored flesh. Paradoxically, one Crookneck variety is the Straightneck, friend of the packer because its shape lends itself admirably to shipping.

Vegetable marrows, less known here than in England and Italy, are tender and mild flavored. They are usually shaped somewhat like a cucumber. Look about for the dark-green Cocozelle or light-green Zucchini with its gray mottlings, if you crave variety in squash fare. Both are grown for early markets in limited areas.

Pick your summer squashes for freshness and heaviness for their size. Remember that, unlike the winter varieties, summer squashes should be eaten while young, that is, while the skin is tender enough so that a fingernail indents it. This will mean that seeds are tender, too — an important consideration, since summer squashes frequently are eaten without discarding rind or seeds. The whole fruit is cut in pieces, then steamed and mashed with butter, or, perhaps, fried. If you are looking for a good pie filling, pass up the summer squashes in favor of the winter varieties. For food value, too, the winter varieties are the better bet with their slightly larger amounts of protein, starches, and sugar. Yellow varieties are rich in Vitamin A and are a fair source of iron and phosphorus.

Big consumer appeal lies in the dry and mealy winter squashes—the Boston Marrow (not to be confused with the vegetable marrows), the Hubbards, the Delicious. Most of the winter types have dark-green or orange-colored rinds, so thick that it sometimes takes an axe to split them. Hardness of skin proves an asset in a winter squash, however, for upon this quality depends storage ability.

Hubbard is a winter squash standby, fine in quality, flavor, and storage qualities. Credit for its origin goes to James Gregory, a seedsman of Marblehead, Mass., who had the first variety called to his notice by an old washerwoman named Mrs. Hubbard. Now there are numerous Hubbard squash strains, most of them bearing fruit of an irregular oval shape with heavy, warty skins. In color the Hubbards run through a good part of the rainbow with their yellow, orange, green, and blue rinds.

Green Hubbard, best liked of any winter squash, is about 12 to 14 pounds in weight, round and warted. The thick dark-green skin is often streaked with grayish white. During storage this rind turns a dusky brown. Break the protecting coat and you find a bright-yellow flesh that is fine-grained and rich—reason enough to be grateful to Mrs. Hubbard.

Topping the Hubbards in flavor is the Delicious, another hard-shelled winter squash. This one has a smooth green skin and fruit pointed at the blossom end.

Squashes may weigh as much as 100 or 120 pounds. These are too coarse for eating but make good stock feed. Such monsters as the Genuine Mammoth regularly carry off prizes for size at county fairs.

Have a care in choosing your winter squashes, particularly if you intend to cache some of them against the winter months when prices are higher. Winter sorts won't keep unless they are well matured and thick-skinned. Soft-rind winter squashes have flesh that is thin, watery, and insipid when cooked. Avoid decay on winter squash. This appears as a water-soaked area often covered with a brown moldlike growth.

With winter squashes, seeds are scooped out before the rich, golden slices of squash are slipped into the oven for baking. Whatever the method of cookery, scrape the shell clean in eating, for the sweetest flesh lies next to the rind.

Not until crisp autumn days does the pumpkin really come into its own, notwithstanding the fact that pumpkin pie comes to table the year round. Pumpkins somehow seem a more typically American vegetable than squashes, probably because they are inevitable accompaniments of our Hallowe'en and Thanksgiving Day dinners. Count on most of the pumpkins—the Small Sugar, the Winter Luxury, the Large Cheese, and Cushaws—for pie-making, however, since they are too mealy for table vegetables.

Table Queen is a small pumpkin boasting fine baking qualities. Its convenient size has caught consumers' fancy. Cut in half, it makes two individual portions. The shell is hard, dark green and slightly ridged. In storage it turns the tawny orange-yellow color we usually associate with pumpkins.

Like the large squashes, the mammoth pumpkins such as the Mammoth King step up at the county fair to receive blue ribbons for size. This variety has been known to yield 100 tons to the acre.

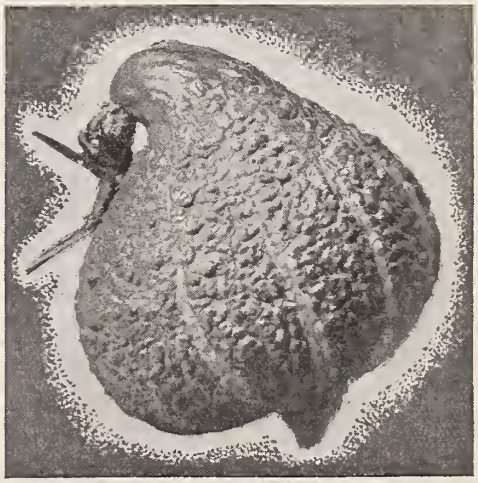
Large tonnage in both squashes and pumpkins goes into commercial canning, the resulting product

[Continued on page 18]

Zucchini, a cucumber-shaped Vegetable Marrow known to Italians, comes to market early.

This flat, scallop-edged, green pattypan, or bush scallop, is a popular summer squash.

Warted Hubbard, with its thick rough skin, is one of the hardier winter squashes.



Your Food Supplies & Costs

FRUIT and nut supplies this summer and fall, with the exception of citrus fruits, are expected to be much larger than a year ago and considerably above average. Indicated walnut and pear production is of record size. Apple and peach production promises to be the largest since 1931. The grape crop is expected to be the largest since 1928. Almond production not only appears to be double last year's small supplies but also the second heaviest on record. Heaviest marketings of peaches and pears ordinarily occur in August. Apple and grape shipments reach their peak during October.

A marked drop in fresh-vegetable prices from May 18 to June 15 offset price advances in all other important food groups, except dairy products, and resulted in a 0.2 percent decline in retail food costs in general. While part of this vegetable-price decline was the usual summer change, most of it was due to an unusually heavy slump in potato prices. Potatoes occupy an important position in the consumers' market basket and food costs. If potato prices had remained unchanged during the monthly period, food costs as a group would have gone up 1.1 percent.

Changes in food costs in different regions from May 18 to June 15 varied considerably from the averages for the country as a whole. In the States west of the Mississippi, where the drop in fresh-vegetable prices was greatest, the decline in costs ranged from 1 to 2 percent. In the East South Central, East North Central, and New England States, where higher prices for most other foods offset small declines in vegetable prices, costs went up about one-half of 1 percent. Costs in the Middle and South Atlantic States dropped slightly more than the average for the country.

Higher prices for pork, beef, and lamb boosted meat costs 2.6 percent. Egg prices advanced seasonally 1.2 percent, and cereals and bakery products moved up 0.5 percent as white bread prices reached their highest level since 1930. Advancing lard prices were the major cause of an 0.7 percent increase in the cost of fats and oils. Cost of dairy products, however, went down 0.5 percent when butter prices hit their seasonal low. Fruit and vegetable costs as a group dropped 4.7 percent, but the decline was due to lower fresh-vegetable prices, since prices of apples and citrus fruits and canned items went up.

Index of retail food costs on June 15, as reported by the Bureau of Labor Statistics, was 86.3 percent of the 1923–25 average. This was 3 percent higher than a year ago. Increase over a year ago was due mainly to sharp advances in meats, and cereal and bakery products, which were 9 percent and 6 percent higher, respectively. Fruits and vegetables, the major factor up to the current month in keeping food costs in general above their 1936 level, were 7 percent lower than a year ago. Eggs were the only other item below their last year's level, the drop amounting to 1 percent.

Fruit and vegetable prices in general are expected to go down during the remainder of the summer and in the fall, but prices of most other items probably will go up. Changes in the level of food costs will depend upon the relative rates of change in each food. Egg and butter prices usually advance during the last half of the year. Reduced supplies of pork and better grades of beef point to further price advances in these items. However, some price declines are in prospect for lamb, poultry, and lower grade cuts of beef.

Potato supplies are expected to continue relatively large during the remainder of 1937 and early 1938. Prices probably will decline further during the next 2 or 3 months and most likely will remain below their level a year ago. Supplies are now coming from the intermediate States, where a crop 50 percent larger than last year is expected. Production in the late-producing States, the source of supplies after August, is indicated to be not only substantially above a year ago but also above average. From May 18 to June 15 retail potato prices moved down from 3.6 to 3 cents per pound.

Low point in butter prices appears to have been reached in June, and prices most likely will go up seasonally during the remainder of 1937. Sharpest butter-price increases usually occur after August. During August and September prices are expected to be lower than a year ago, but they may go above 1936 prices during the last 3 months. Pasture conditions have been better than a year ago, and butter production during the third quarter of 1937 probably will be in excess of a year ago. From May 18 to June 15 retail butter prices moved down from 38.8 to 38.3 cents per pound.

Poultry prices probably will continue to decline seasonally during August and September, despite a sharp reduction in chick hatchings this year. Record cold-storage holdings will tend to offset smaller fresh supplies. Prices of roasting chickens, however, most likely will decline less than other classes and may even advance because supplies are only slightly above average. Most of the price decline probably will occur in lightweight chickens and fowls. Retail prices of roasting chickens went up from 32.3 to 32.7 cents per pound between May 18 and June 15.

Egg prices appear to have reached their yearly low point, and an upward price trend is in prospect for the remainder of 1937. The seasonal advance this year is not expected to be as large as in 1936, because of above average storage-egg stocks. From August through January the bulk of egg supplies comes from cold storage. Egg prices to consumers went up almost one-half cent to 32.5 cents per dozen from May 18 to June 15.

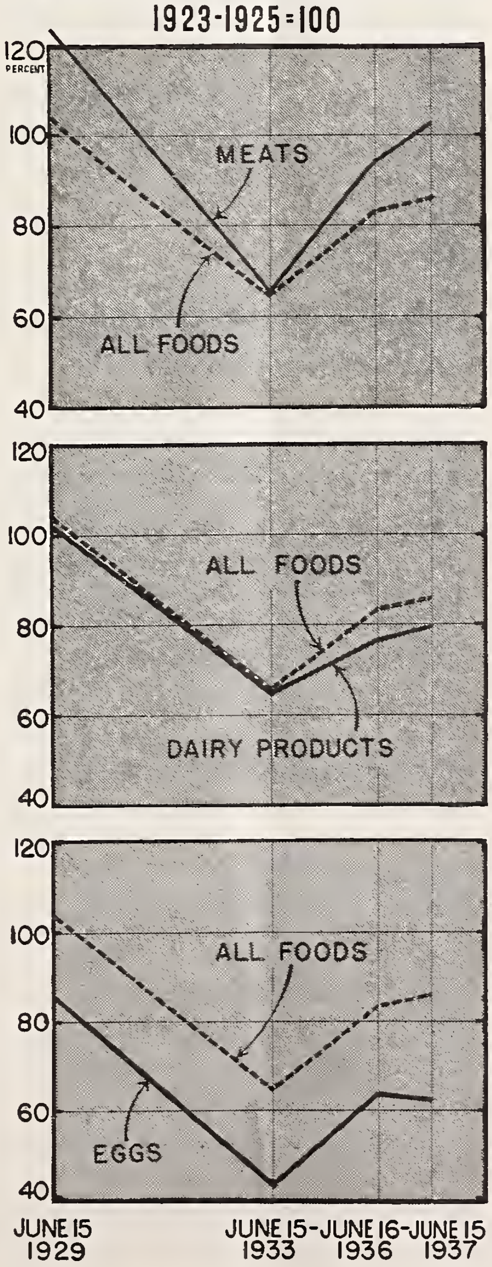
Hog marketings during the remainder of the summer probably will continue small, and prices are expected to be well maintained or to register slight advances. During the last quarter of 1937 and the first quarter of 1938 slaughter most likely will be smaller than that a year earlier. However, the relatively large size of storage stocks is tending to offset in part the price-boosting effect of reduced slaughter. Retail pork prices continued moving up from May 18 to June 15. Fresh pork and ham advanced about 1 cent per pound. Bacon and lard prices, however, were up only one-half and one-fourth cent per pound.

Grass-fed cattle supplies are expected to increase seasonally during the summer and fall. However, marketings of well-finished grain-fed cattle most likely will be smaller than usual. In view of the small supplies of better grade cattle it appears that prices of these grades will be well maintained. Upward trend in retail beef prices which commenced last June continued from May 18 to June 15. The price of steaks advanced about 1¾ cents per pound, while roasts were 1 cent a pound higher.

Peak in lamb prices appears to have been reached. The delayed seasonal decline in lamb prices commenced in mid-June, but prices in early July were still higher than a year ago. Ordinarily lamb prices move down to their season's low in October. Only slight price declines are in prospect for August. Retail prices of all lamb cuts went up from May 18 to June 15, but most of the increase occurred in leg of lamb and rib chops. These two items advanced about 1 cent a pound, while other lamb cuts registered only slight increases or remained unchanged.

Average retail white bread prices in the United States moved up to 8.7 cents per pound on June 15. Since mid-February, United States average bread prices have gone up one-half cent per pound to reach their highest level since June 1930. At

A PERSPECTIVE OF FOOD COST CHANGES
1923-1925=100



A CLOSE-UP OF FOOD COST CHANGES
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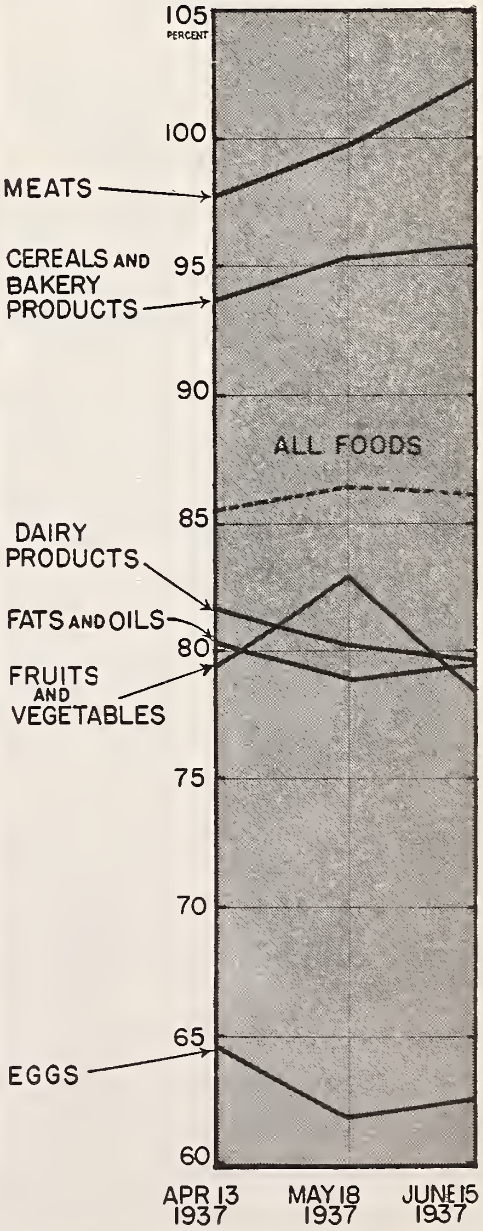

the same time wholesale prices of materials which go into bread have been going down. On the basis of estimated average cost of ingredients in a typical pound loaf of bread, computed by the Department of Agriculture, it appears that retail bread prices have gone up more than ingredient costs have increased, resulting in a wider gross margin to the baker and retailer. The gross margin between the cost of ingredients in a typical pound loaf of bread and the retail price of that loaf on June 15 was 5¾ cents. This was the highest margin for any date since January 1931. It also was at least one-half cent per pound above the yearly average margins in each of the last 5 years.

CONSUMERS' QUERIES AND COMMENTS

[Concluded from page 2]

sugar flavor. This sugar has a lower sucrose content, a higher mineral and nonsugar content than the raw product. Mineral and nonsugar contents of the two types of sugars are different, however. For some of the material found in raw sugar was lost in the refining process; some was left in concentrated form.

Principal value of sugar in the diet lies in its sucrose, best measured in terms of calories. White sugar has the most calories. Therefore, as an energy food, it scores highest. In fact, white sugar contains twice as many calories per pound as does beefsteak. White sugar cannot possibly be considered a dead food, if by that is meant a food lacking in nourishment. Remember that it is richer in carbohydrates than its brown brothers.

Prize for popularity goes to white sugar on another count. White sugar adds pure sweetness to other products without changing the original flavor; brown sugar always adds a foreign taste. Try a teaspoonful of brown sugar in your coffee and then a teaspoonful of white and you will see what this means. White sugar has other points in its favor. It has excellent keeping qualities and a strong appeal to the eye. It gives consumers what they want—a pure product that *looks* pure.

Price a wholesale lot of brown sugar and you will find it less expensive than the same amount of white. Retail packages of brown sugar run higher than the white, however. This is because brown sugar is not sold in as great a quantity. Yet for the small amount that leaves the grocers extra services in the matter of packaging and handling are required. Brown sugar may spoil, too. The consumer must pay the piper, or at least the grocer, for all these charges incidental to distribution.

PICKING A WINNER

[Concluded from page 6]

must cultivate the fields, fight insect enemies such as the melon aphid, striped beetle, and cutworms; must spray against such death-dealers as wilt, root knot, anthracnose, and stem-end rot.

At harvesting time melons are cut ripe. Care and speed are essential in hauling the melons from the field and placing them in boxcars. Cars should be loaded, closed, and billed out the same day that the melons leave the vine.

Watermelon growers don't get off light with the troubles common to most farmers. They carry one peculiar burden, since melon acreage must keep constantly on the march. They must find new fields every year or else plant watermelons in long-period rotation. The same land can seldom be planted to watermelons 2 years in succession because of the susceptibility of watermelon to wilt—a disease which stays in the soil for years after a crop has been harvested.

The nomadic melon may be able to settle down now that experiments conducted in Iowa have resulted in the development of wilt-resistant melons. At Muscatine, Iowa, one of the sections leading in the late melon-growing market, these new types, especially the variety known as Pride of Muscatine, have already met with huge success. It may be that within the next few years, these new strains will prove to be the godsend that watermelon growers in the wilt-infested area have been looking for.

SQUASH ON THE MENU

[Continued from page 15]

being much alike in both cases. Varieties used for canning must be heavy yielders, with flesh of a good color and medium texture.

Planting of squashes and pumpkins takes place after danger of injury from low temperature is past, for both plants are sensitive to frost. Pumpkins require heat, too. However, the pumpkin is one of the few vegetables that thrive under partial shade. It can grow in the shadow of some tall-growing plant, such as corn, thus furnishing additional farm income from each acre so planted.

Winter varieties of squashes and pumpkins should be gathered and stored before autumn frosts nip them. If you have a good warm attic or cellar, you'll probably want to lay away some of these fruits. Good results come from first curing the pumpkins and squashes in a hot, well-ventilated room. Put them near the stove for about 10 days, then move them to a dry place with a temperature between 50° and 60°

F. Higher temperature would result in shrinkage and this would impair quality. No matter how ideal storage conditions are, though, quality and palatability decrease with length of storage. Remember to keep surfaces dry during the storage time, or mold may gather on the squashes. Don't pile the fruit upon each other, but place them in a single layer. Shelves in a well-ventilated room or near the furnace in the basement make excellent storage places, if you are lucky enough to have these. Thus stored, a supply of squashes and pumpkins should be on hand through Christmas, or under favorable conditions the squashes will last the year round.

INTENSIFYING its enforcement of honest weights and measures ordinance, the New York City Department of Markets, Weights, and Measures is spotting violations at the rate of about 1,000 per month, a press report states. "Violations range from 'million-dollar' scales (supposed to make a million dollars for the owner) to huckleberry boxes with false bottoms. The scales are usually of the 2-pound capacity, spring type, from which the 20-pound face has been removed and a 25-pound face substituted. The huckleberry boxes, discovered by an investigator assigned to the Bronx, had their inner bottoms pushed up and wads of paper placed underneath, so that a pint container was made so small it held only two-thirds of a pint. Since the berries were dumped from the box into a paper bag the customer had no opportunity to examine the measure. . . . Bacon put up in 6-ounce packages", the report continues, "was so often sold as a half pound that officials finally persuaded manufacturers to standardize their packages at 8 ounces."

STUDY QUESTIONS FOR THIS ISSUE

1. Examine an advertisement of sheets appearing in a local paper. How many facts does the advertisement give regarding the construction and wearing qualities of the sheet?
2. Would the consumers in your town benefit from such a service as that of the large city department store described on page 2?
3. How would you go about getting such a service?
4. What are the identifying marks of the most popular watermelon sold?
5. Which is the largest watermelon producing State?
6. How many watermelons were produced last year?
7. What is the safest way to test for a good watermelon?
8. What is the food value of watermelons?
9. How does the marketing agreement covering watermelons help to raise prices to farmers?
10. Why should producers of watermelons be protected from very low prices?
11. Which are the three most important minerals we should get from foods?
12. Which foods are the most reliable sources for most minerals?
13. Name one reason why milk is so important in the diet.
14. Why should everyone eat some foods rich in iron every day?
15. Name 10 foods rich in iron.
16. Which types of squash are plentiful at this time of year?
17. How should you select summer and winter squash to get the best quality?
18. What are some rules to remember in storing winter squashes and pumpkins?
19. What are the prospects for supplies of fruits and nuts this year?
20. How did food prices on June 15 compare with prices a year ago? With prices in 1923–25?
21. How does the food value of white sugar compare with brown?
22. What are some of the reasons why brown sugar may cost consumers more than white?

OUR POINT OF VIEW

The CONSUMERS' GUIDE believes that consumption is the end and purpose of production

To that end the CONSUMERS' GUIDE emphasizes the consumer's right to full and correct information on prices, quality of commodities, and on costs and efficiency of distribution. It aims to aid consumers in making wise and economical purchases by reporting changes in prices and costs of food and farm commodities. It relates these changes to developments in the agricultural and general programs of national recovery. It reports on cooperative efforts which are being made by individuals and groups of consumers to obtain the greatest possible value for their expenditures.

The producer of raw materials—the farmer—is dependent upon the consuming power of the people. Likewise, the consumer depends upon the sustained producing power of agriculture. The common interests of consumers and of agriculture far outweigh diversity of interests.

While the CONSUMERS' GUIDE makes public official data of the Departments of Agriculture, Labor, and Commerce, the point of view expressed in its pages does not necessarily reflect official policy but is a presentation of governmental and nongovernmental measures looking toward the advancement of consumers' interests.

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With watermelons, it's bigness that counts. Knowing types, seasons, and how to spot a ripe one helps, too, in getting your money's worth of this important summer diversion.

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There's only a penny's weight of iron in the average body, but it plays a major part in making bodies good working and playing machines.

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Consumers and farmers in the business of supplying their needs cooperatively report developments in seven States.

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More sources of information for students of consumer problems on how to select wisely and economically household necessities.

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CONSUMERS' Guide

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MILK FOR MILLIONS

CONSUMERS' Guide

Issued every two weeks by the Consumers' Counsel, Agricultural Adjustment Administration, Department of Agriculture, Washington, D. C.

Vol. IV, No. 10 August 9, 1937

Consumers in Massachusetts have an alphabet all their own, compiled by the executive secretary of the Hampshire County Consumers' Institute. Other consumers elsewhere may want to try it out in their shopping and their study of consumer problems to see if it spells greater buying satisfaction. Following is the Massachusetts Consumers' Alphabet:

A *Are* you *aware* of what consumer problems are? *Ask* for information about what you buy.

B *Beware* of *bunkum* in advertising. *Bargains* are not always a *best buy. Begin* your consumer education by reading consumer literature available through your Consumers' Institutes.

C *Consumer cooperatives* and *credit unions* are *consumer creations* which *concern* you. Other *countries* are already using them.

D *Drugs,* foods, and cosmetics need further Government regulation for your protection. Do you know about Food and *Drug* legislation?

E *Enlist* with the Consumers. *Educate* yourself. Don't be an *easy* mark. Unless consumers organize and work together to make their rights respected, they deserve just what they get.

F *Find* out about *funeral* costs before you die, if you would protect your *family. Failure* to do so may result in having your insurance *fatten* the receipts of the undertaker rather than *furnish food* and education for your dependents.

G *Government grades* are a safer *guide* to buying than *glamorous* ads. Know the *grades* of vegetables, meat, and canned goods.

H *Help* the consumers in your city. Join one of the Consumers' Institutes of Massachusetts. There are no dues, no assessments; the Institutes are nonpartisan, noncommercial, and nonpolitical; and the monthly meetings are worth while.

I *Investigate installment* buying, before, not after, you sign on the dotted line; you may be assigning your wages. Fine print is often most *important.*

J *Jot* down prices and shop around for everything from groceries to clothing. Don't *jump* at conclusions about merchandise. Learn to *judge* values.

K *Know* your fabrics. Your Consumers' Institute will furnish you with information.

L *Live* simply and *leave luxuries* alone if you would balance your budget in 1937. *Listen* to the various Consumer Broadcasts over the radio. You will *learn* a *lot* and *live* better for *less.*

M *Milk* is still one of the best and cheapest foods for the family, especially in hot weather. *Meats* are high but still necessary, and the left-overs must be utilized with care.

N *Never* throw away anything. If you cannot use it yourself, give it to someone else who can.

O *Open* your ears, your eyes, and your mind to consumer questions, so that you may buy wisely and "owe no man anything."

P *Price* is important to the *provident. Pick* your *purchases prudently* if you *prize* your *pennies.*

Q *Question* the merchants where you buy. They are always glad to help you if you ask them. *Quality* is even more important than price.

R *Remember* to *read* the labels for *real information. Rayon* fabrics are legion. Do you know the various types and how each should be washed or cleaned?

S *Save something* every *Saturday,* if it is only a nickel. *Sums* are better than *subtractions. Shop* around for everything.

T *Tell* your friends about the consumer work. *Talk* about it at your club meetings and sewing meetings, even at your missionary meetings, for it is real missionary work. *Thrift* will make you *thankful* when you have to pay your *taxes.*

U *Utilities* of all kinds are *under attack.* Should these be managed for the *use of the consumer* or for the profit of a few? Or is there a middle ground?

V *Vegetables vary. Vigorous insistence* on *value* is *vital,* if you would provide the family with *vitamins.*

W *Welcome* all the consumer information you can get. It will *work wonders. Wills* should be made by everyone—*women as well as men.*

X Y Z You may yet expect to balance that budget, if you cut out the *extras, yearn not* for what you cannot afford, and are *zealous* in saving the pennies, left-overs, and yourself. And, lastly,

ETC. May you learn more of consumer questions than just the alphabet.

Wanted: An outline of your consumer course! Is your home demonstration club, your cooperative, your consumer club staging any formal study of buying problems? Are you a teacher of courses in home economics, general economics, commercial economics, which include discussion of how low-income consumers can make their expenditures count in better buying? The Consumers' Counsel Division is making a collection of outlines of consumer courses. We would appreciate your sending us a copy of your course outline together with a brief story of your consumer education work.

CHAMPION among foods, milk does more for good nutrition than does any other single food. . . . Champion among farm products, milk supplies American farmers with one-fifth of their farm income.

IF EVERYBODY could afford an adequate diet at moderate cost and parceled out his food money in the best way, each of us would get about 305 quarts of milk or its equivalent each year. . . . What we are getting is about 194 quarts a person a year—an average which means that many are getting less.

HOW to step up milk consumption to good nutrition levels is one of the most baffling food problems. . . . To produce enough milk, farmers must be paid a price that makes adequate production for everyone continuously possible. . . . To be able to consume more milk, consumers must have larger incomes or prices must be lowered. . . . Is it possible to achieve both under our present method of distributing milk?

WE TAKE our readers, in this article, on the first lap of an exploratory tour of the many tangled problems involved in milk production, distribution, and consumption. Other stages of the tour will come in later issues.

MANY of the facts in this series come from the Federal Trade Commission's inquiry into agricultural commodities. Where they appear they are so credited. Earlier articles based on this inquiry have appeared in our issues of May 17 (general review), June 14 (tobacco), July 12 (potatoes).

MILK FOR MILLIONS

TWENTY-FOUR and a half million cows go out to pasture in America. They munch grass, chew their cuds, and in their contented bovine way they quietly set about the manufacture of milk.

No one involved in the problem of milk except the cow is contented. Consumers complain that they do not get enough milk at low enough prices. Producers say that that may be so, but from their end it seems that they frequently produce too much milk and more often get too little for producing it. Distributors caught between the farmers and the consumers say yes and no, and most of the time say nothing at all.

Here today and gone tomorrow might just as well have been said about milk, for milk is the most short-lived of commodities. The milk we drink is hardly ever more than 48 hours old. The life span of a glass of milk is short indeed, and it is this fact that makes the milk industry unlike any other industry. Denying the necessity for such haste, however, some point to a recent shipment of milk from Portland, Oreg., to Manila, a 26-day journey. Reported consumers from Manila, "The milk was fine."

But the supposed perishability of milk has geared the source of supply close to the point of consumption. Our vegetables may come from California or Florida; our wheat may come from almost anywhere in the world; our coffee, our cocoa, and our spices come from the ends of the earth, but our milk comes from our community backyard, the milkshed, whether it must come from there or not. In Baltimore, a city ordinance requires that it come from a distance no greater than 50 miles. All except one percent of Milwaukee's milk comes from within 40 miles. Seventy percent of all the milk shipped into St. Louis comes from within a radius of 50 miles.

Milk in its natural state, if it is to be handled at all, must be handled at once. Cows observe no holidays, are as yet unaffected by the demand

Safe milk is good health insurance, but sanitary regulations may affect more than the safety of milk consumers drink.

for a 5-day week. To receive the cows' output, dairy farmers must work every day; trucks and trains must move continuously with their cargoes of milk; fluid-milk plants, creameries, evaporators, cheese factories, every milk-processing plant must be geared for quick action.

Rivers of milk, like the rivers that run through America, would cause no problem if they flowed smoothly, but like other rivers, the milk river has its flood problem and its drought problem. One-half of the Nation's milk is produced during one-third of the year. In the spring when most cows freshen, when pastures are green, production of milk doubles and sometimes trebles in a few weeks. A torrent of milk flows into milk-processing plants. In the fall and winter the stream of milk runs low. Unlike grains and other commodities, milk cannot be stored for long in its natural state. The use of milk must be adjusted to meet these seasonal changes in supply.

Flood control of milk is effected by the diversion of milk into byproducts during the flood tide, by lessened manufacture of milk products during the ebb tide. Flood milk—milk in excess of the demand for fluid—is generally called "surplus" milk. Paradoxically the supply of "surplus" milk exceeds the amount of milk that goes into fluid uses. In 1934, of every 100 pounds of milk produced, 41 pounds were used in fluid form; 44 pounds were spread on bread or used in cooking as butter; 6 pounds were eaten as cheese grated on spaghetti or sliced in sandwiches; 3 pounds were spooned into consumers' mouths in the form of ice cream; 4 pounds were poured out of cans in the form of evaporated or condensed milk; the remainder went into that almost forgotten animal, the calf, or was used in the form of miscellaneous milk products, such as malted milk, powdered milk, and so on.

Dairying is one of the oldest of professions. The keeping of animals for milk extends back into history beyond the knowledge even of archeologists. Yet today the production of milk is not so different but that some prehistoric herdsman could not soon feel at home on a modern dairy farm. Chief changes have come about through the effort to make cows more productive and the milk less perishable and more healthful.

Streamlining cows for milk production is not so simple as streamlining trains for speed. But some idea of how successfully the latest model cow has been streamlined may be gathered from the fact that though nature originally provided the cow with only enough milk to take care of a calf, today many cows provide enough milk to take care of 10 calves. Highly bred dairy cows are such perfect milk-producing machines that practically all the food they can consume and digest is used to make milk. As a consequence such cows are spare, angular animals with little unnecessary flesh on them. The nutrients necessary for flesh-making go into milk-making. Special breeds of cows, too, produce milk with either high or low butterfat content. Holstein Friesians, for instance, produce large quantities of milk that is not rich in butterfat. Guernseys and Jerseys, on the other hand, while they do not produce so much milk, produce milk that contains as much as 5 or 6 percent butterfat. The average American cow in 1935 produced 4,169 pounds of milk a year. For 1924 this average was 3,784 pounds of milk.

Drink milk for health, the slogan runs, but milk has not always been the most healthful drink available. Before the days of milk inspection a study of 240 epidemics in Massachusetts revealed that 19.2 percent, or 46 epidemics, were due to milk infection. Typhoid fever, diphtheria, scarlet fever, septic sore throat, tuberculosis—all of these dread diseases at one time were the hazards incurred in a glass of uninspected milk.

Scientifically safe milk had to wait upon the development of scientific knowledge. First milk laws, not surprisingly, were concerned with the adulteration of milk rather than with impure milk. First milk regulation on record was passed in Glasgow, Scotland, in 1809. This law prohibited the dilution of milk with water. First English law was passed in 1860, also prohibiting the watering of milk.

Earliest attempts at milk control in the United States occurred in Massachusetts. In 1856 a State law was passed prohibiting the adulteration of milk. In 1859 a Boston milk inspector was appointed. In the same year a law was passed making illegal the use of distillery slops for dairy feed. Until 1900 most milk inspection laws were devoted solely to the detection of watered, skimmed, and adulterated milk.

Montclair, N. J., in 1900 initiated the bacterial examination of milk. The inspection of milk as we know it today, on the farm, on the way to the city, and finally in the processing plant in the city, did not become general until about 1910.

Dairy inspection received its impetus from the efforts of two doctors in Montclair, N. J., in 1889. These men made a study of sanitary milk production, and then having satisfied themselves that milk could be produced under conditions that were perfectly healthful, they looked for a farmer who would agree to produce milk under their supervision in accordance with their instructions. This milk was called "certified milk." The name "certified milk" was registered with the United States Patent Office and the right to use the name was granted only to dairies which followed certified milk practices. Today medical milk commissions in some States and State Departments of Health in other States supervise the production of certified milk. Certified milk is now the highest quality *raw* milk that is obtainable. The most important effect of this work, however, was the establishment of the fact that it is not impossible to have hygienic dairies, and from this original demonstration by two New Jersey doctors our present complex system of dairy inspection has grown up. Apart from its historical interest, however, certified raw milk is relatively unimportant on the market. Most consumers find it too expensive, and use, instead, pasteurized milk. But where pasteurized milk is unavailable smart consumers take no chances with milk; they boil it before they use it.

Public demand for pure milk has resulted in many milk laws. Safe milk is good health insurance. Milk ordinance objectives should be simple, should seek only to obtain good clean milk for the consumer. To

Cleanliness must start at the farm, if milk is to be safe, with clean cows, clean barns, clean milkers, clean pails, and clean anything that comes even indirectly in contact with the milk—as here on this A-1 dairy farm.

Heat multiplies unhealthy bacteria so milk must be kept cool from the moment it is drawn from the cow. This farmer runs water around his milk-filled cans until time to start the milk on its journey to town.

achieve this, milk ordinances should require sanitary dairy practices and define practicable standards of purity. They should set up minimum butterfat requirements, and minimum solids-not-fat requirements for all milk, irrespective of grade. Grade standards of a milk ordinance should be standards of purity, not richness. They should prescribe proper conditions of production, of transportation, of pasteurization, and of delivery.

Ideally, inspection under adequate ordinances should start with the cow. Dairy inspectors who score dairies by means of a model score card prepared by the United States Department of Agriculture, first examine cows to see if they are clean and in good health, find out if they have been tested for tuberculosis, determine whether or not their food and water are clean and wholesome. In stable inspection, they examine the drainage, look for possible sources of contamination, see to it that the cows are provided with enough light and air, that the walls, floors, and roofs of the stables are well constructed. The cows' bedding is inspected, and extra credit is given for heating systems.

Under perfect conditions inspectors demand that milking utensils be washed frequently and kept spotless. give extra credit for milk coolers. Clothes and health of the attendants should be noted. Other safeguards are washing the cow before milking, removal of manure from the stables, and the use of tested cooling and transportation practices.

Many communities are still unprotected by any milk ordinance or inspection. Many are still handicapped by poorly drawn ordinances, inadequately staffed inspection offices. When consumers are apathetic, farmers resistant, or city health authorities not careful enough, safe milk standards slip. The United States Public Health Service reports every year from 30 to 50 outbreaks of milk-borne disease. These are always the result of inadequate milk sanitation. There is no sound reason why practically all of them may not be prevented.

Milk ordinances can make problems as well as solve them, when they go beyond their primary function of assuring a sufficient supply of safe milk. Then they act as tariff walls barring out shipments of safe milk which might relieve consumers from high prices or shortage in supply. This, it seems, they may do in two ways: By permitting the local market to consume as fluid milk only milk produced in the nearby milkshed, and again by limiting the number of farms within the milkshed which local authorities will inspect and certify for shipment of milk to their city.

"When health authorities find a sufficient volume of local inspected cream to meet the local needs, without consideration as to its cost, no inspection or permits are given for admission of the more distant product." A committee of the International Association of Dairy and Milk Inspectors was discussing the effect of health regulations on the economics of milk when it made this statement in its report to the association in 1933. "Many health officials in the East", it said, "have been somewhat embarrassed during the present economic condition in having to restrict interstate shipments of milk and cream by using health regulations in what everyone knows is an unlawful and unjust procedure."

The Deputy State Health Commissioner of New York told the convention some of the conclusions arrived at by a committee of his State which had studied the safe-milk requirements of different cities. Several of his comments reveal the intimate tie between health regulation and market control. "I might say here that the committee did not attempt to classify certain requirements which have acquired considerable vogue of late, such as those limiting the local production areas and requiring pasteurization to be done within the municipal limits. The intent of these is so obvious that we thought it better to maintain, for the time, a 'hands off' attitude." He told how conflicting interests of large and small distributing agencies may give rise to conflicting local ordinances which interfere with the free flow of milk. Health officers, he says, usually defend these regulations designed to limit the field to local industry, with the argument that they can maintain close supervision only over local sources with the funds at their disposal. "At times", the Commissioner said, "there have been inti-

Even transporting milk has become a complicated business with its own points of friction, its own technical problems, its own achievements.

mations that health officers had had little to say about the enactment of these regulations or ordinances and that they had been instigated by the local producers and dealers."

"It is evident", warns the first committee quoted above, "that more laws and barriers will be made to restrict the free flow of interstate commerce unless some effort is made in a broad way to standardize the methods of inspection." A question to consumers is posed by this committee: "Since Federal control of shipments of meat has proven satisfactory for more than a score of years, is it not feasible to consider milk and cream under a somewhat similar plan?"

No direct recommendations come from the Federal Trade Commission on whether or not the present system of local sanitary control should be stripped of its power to control supply (and therefore price) of milk. The Commission recommends more, not less, local control of supply, but by farmers through inter-marketing-area agencies representing local cooperatives ". . . with a view to more effectively controlling the transfer of milk and cream from one producing area to another. . . ." But the Commission also favors the standardization of sanitary regulations by proposing that a Federal authority should be directed ". . . to prepare and recommend for adoption by the several States, uniform laws relating to . . . sanitary regulations, inspection rules, and other matters"—a program which, if put into effect, might go far to strip local sanitary control of its power to influence the price consumers pay for fluid milk and cream.

Such a standard milk ordinance which embodies all necessary health requirements has been drafted by the United States Public Health Service and is in operation in 676 cities. Each year the provisions of this ordinance are checked with State health authorities, the dairy industry, and experts in the Department of Agriculture, to conform with the latest scientific findings in the field of milk control and the best administrative practices. We described this ordinance in the CONSUMERS' GUIDE of February 22, 1937.

Our grandmothers perhaps remember Mr. Jones who owned several cows and a farm on the outskirts of town. Grandmother left a jar with 4 pennies in it at her gate every morning and Mr. Jones came along during the morning with a horse and wagon and a can of milk. He took the 4 pennies from the jar and then filled it up to overflowing with milk from the can. Later on grandmother remembers that Mr. Jones sold his nearby farm and moved farther out into the country. Then her milkman, Mr. Brown, came around each day with a horse and wagon loaded down with many cans of milk. Grandmother went down to the gate with a pitcher and Mr. Brown filled the pitcher up for her. The difference between him and Mr. Jones was that Mr. Brown did not own the cows from which his supply of milk came. He bought the milk from Mr. Jones.

Mr. Jones' successor was the ancestor of the modern milk distributor. Mr. Jones himself has been pushed far out into the country, the town has become a city, and the city is sharply and abruptly different from the country. To bridge the gap between farm and city is too large a job for a horse and wagon. Just as the simple candle has given way to dynamos, transmission systems, and electric lights, so the homely can of milk and the neighborly Mr. Jones have given way before modern dairy farms, elaborate transportation systems, scientific bottling plants, complex distributing systems, and intricate economic relationships.

There are 605,000 Mr. Joneses operating dairy farms today. Besides there are 4,000,000 other farms that keep cows for milk. There are approximately four cows to each farm in America today, some with more, others with fewer cows. On full-time dairy farms there are approximately 12 cows each. The milk industry has grown from a neighborly service to the largest farm industry, with a cash return to farmers in 1936 of 1 billion 300 million dollars.

Three fluid milk economies exist side by side in America today. The first, the simplest, is the economy in which the farmer and his family and his livestock consume all the milk produced on their own farm. The second, which our grandmothers remember, and which still exists in

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From the farm to country receiving stations or city pasteurizing plants, by train or by truck, whatever the cost it comes out of the farmer's pay check.

Motor trucks now do more milk hauling than trains to many cities, but not many are equipped as is this glass-lined model to keep milk cool and uncontaminated.

LINEN CONSUMERS ARE LUCKY

Aristocrat among fabrics, linen comes high because cultivation of flax and weaving of cloth make exacting requirements. Tips to consumers with big enough budgets tell how to spot quality and insure long life to linens

COLONIAL dames valued a fine linen damask cloth, a snowy linen kerchief for their neck, a dress of homespun linen, not only for its use and beauty, but for the many tedious hours of labor that went into making it. Often the flax had been grown in their own fields. Every member of the family had helped to harvest it, thresh it, to ret it, and scutch it, so that the long fibers which part so reluctantly from the flax straw might be used by the mistress of the household for her long winter spinning chore. After the spinning of the fiber into stout yarns, there was still the weaving into cloth. Small wonder dresses and shirts were turned and returned in those days. Materials from Europe were expensive, boats were few and far between. Clothes to wear, as well as food to eat, had to be produced at home.

Today the spinning wheel to twist a fine linen yarn adds a bit of color to the early American living room or gathers dust in the attic. Fields of flax on New England and Southern farms have given way to fields of grain and cotton. Our utility clothes—dungarees and overalls—are made of machine-made cotton materials.

Machinery absorbing many hours of hand labor has made cotton the king of our fiber crops. Since the invention of the cotton gin in 1793 flax-fiber production in this country has been steadily losing ground. The many processes involved in readying flax fiber for spinning into yarn are still largely done by hand. Only 250 to 450 tons of the 4,000 to 8,000 tons of flax fiber used annually by United States flax-spinning mills are produced in this country. The rest we import from Belgium, Russia, and the Baltic countries where workers are highly skilled in the culture of flax, and where the cost of their labor is cheap. Flax fiber is used not only for making fabrics but for the manufacturing of papers. The United States uses annually 6,600 tons of flax fiber in the form of cigarette paper alone. About three-fourths of this paper is made in Europe. For the past few years American cigarette-paper companies have been fostering flax-fiber growers in this country.

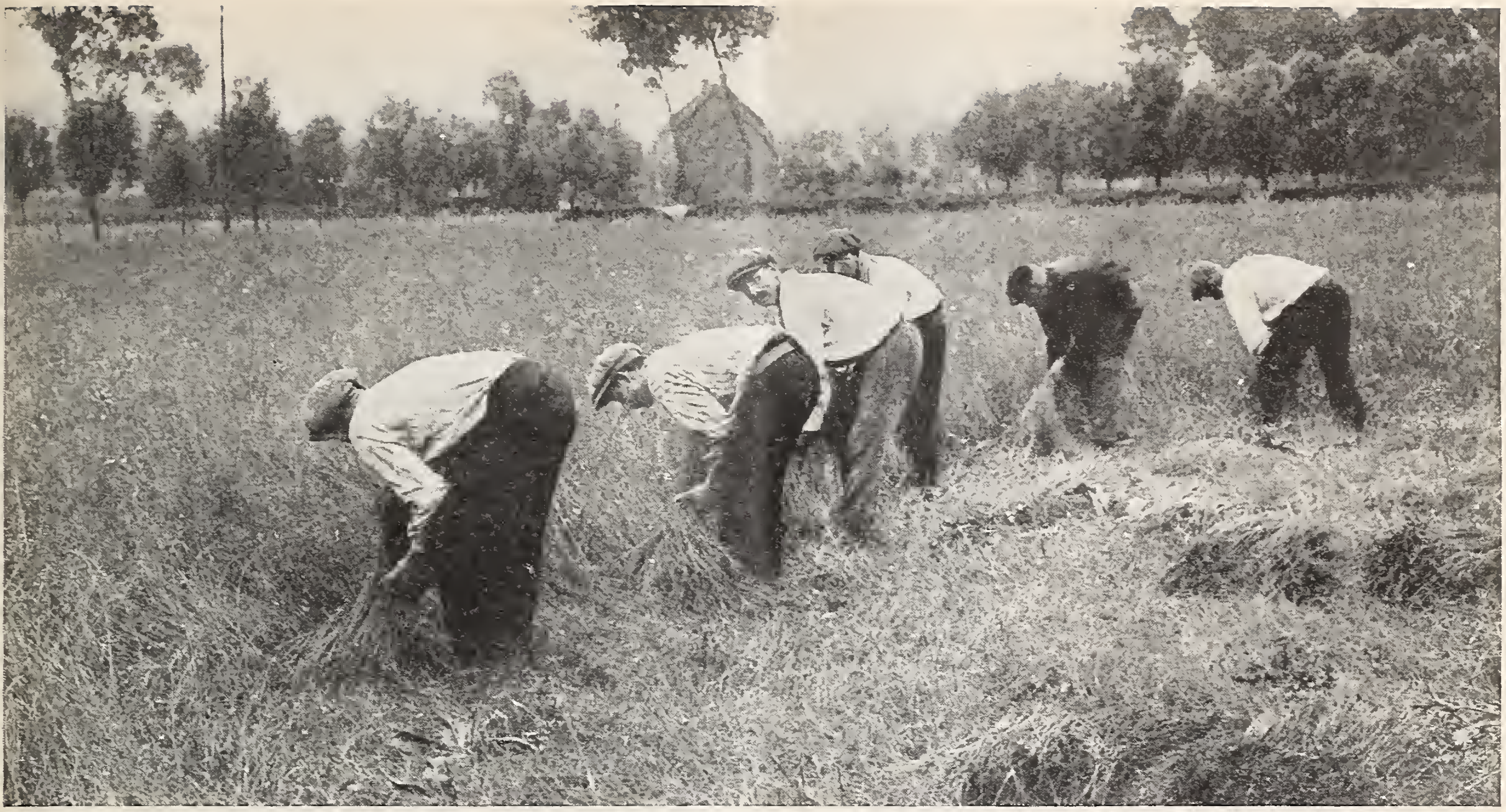
Only a small percentage of the average 2¾ million acres yearly sown with flax in the United States is cultivated for flax fiber for yarns. Most of it is raised for seed, which is a valuable product in the manufacturing of oils for varnishes and paints. A portion of the flax fiber we do raise is used for upholstery tow—stuffing for furniture, automobile, and Pullman seats.

Flax will grow well in many different climates, but the cultivation of flax for sturdy even fiber for fine yarn makes more exacting requirements. In its growing period it demands its moisture in the gentle form of heavy dews and abundant fogs rather than days of steady rain. As it ripens it wants warm, dry days. The time flax fiber is harvested is very important. If the plant is pulled from the ground too early, the fiber will be too fine and weak; if too late it will be brittle and of little use except for upholstery tow. Only the stem of the plant from the ground to the first branches has useful fiber for the making of yarns.

Regions around the Great Lakes, Puget Sound, Wash., and the Willamette Valley, Oreg., offer ideal conditions for the growing of flax for fiber. The amount of flax grown in these districts depends on the presence of a scutching mill nearby. A farmer seldom considers raising flax for its fiber unless he has a contract with a mill which promises to buy his crop.

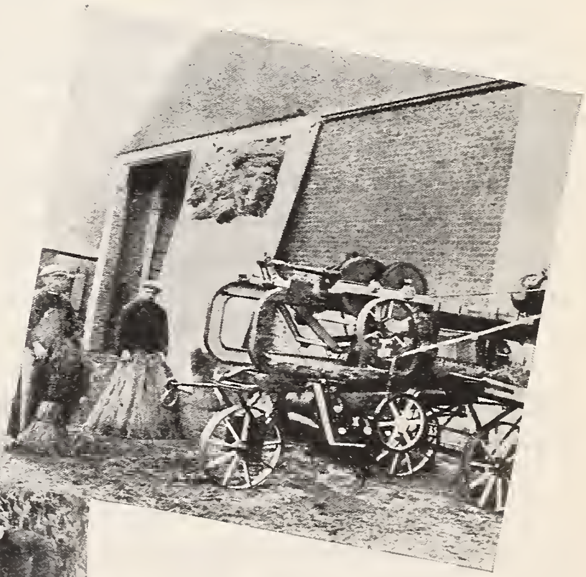
At one time Michigan farmers, because of the presence of 18 scutching mills in the State and in western Ontario, raised a great deal of flax for fiber. Today most of these mills have closed down.

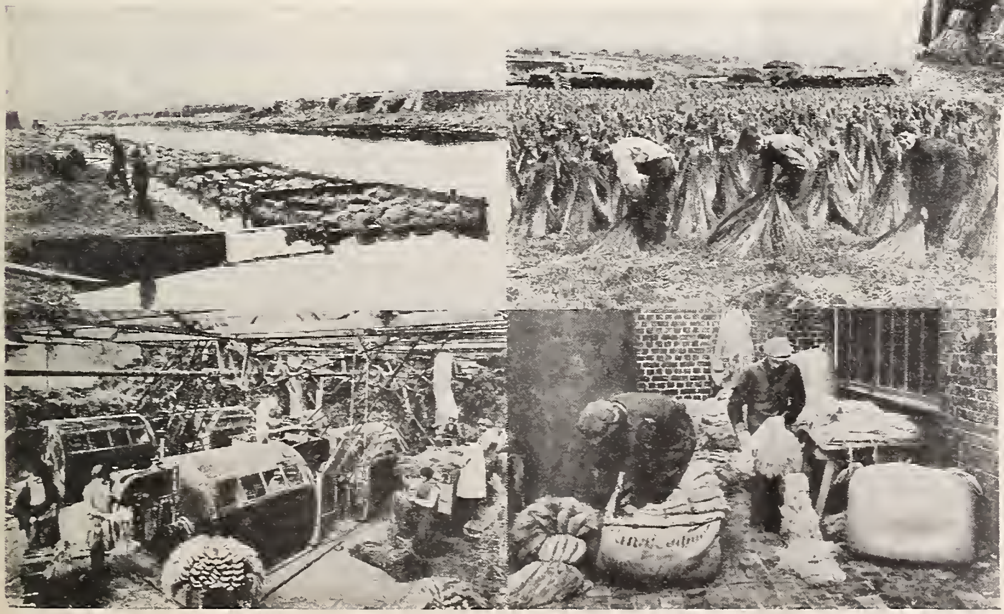
Most flourishing flax-fiber center in the United States at present is in Oregon and one county in Washington State. There both the AAA and the WPA are lending a hand to help build up domestic fiber-flax production. AAA's help to farmers takes



HOW THEY DO IT IN BELGIUM

Much of the flax used for spinning our beautiful linen fabrics comes from abroad where workers are highly skilled in its culture. Pulling is still done by hand (above), though machines are crowding out this primitive method. Great care must be taken in removing the seed (right) so that the straw is not injured. Below (top) after threshing, the straw is retted or rotted by soaking in water, then "wigwamed" in the fields to dry. (Bottom row.) Breaking and scutching, partly by hand, partly by machine, finally separate fiber from straw; after grading, the fiber is ready for the spinning mill.





the form of a subsidy. With funds made available to the Secretary of Agriculture from tariff receipts, under section 32 of the Agricultural Adjustment Act, a bonus of about $5 a ton was paid last year to pioneers in fiber-flax raising. This year the bonus will run around $7.50 for each of some 5,000 tons.

Encouraging farmers to grow flax for fiber purposes would be an idle gesture if there were not adequate facilities for preparing the fiber for spinning. To insure these, AAA inspects and approves scutching plants where this process is done. Seven such plants in Oregon have been approved; five of them are cooperatively owned by the farmers themselves. Three of these have been established with WPA help. Now Oregon and Washington farmers, operating their own scutching mills, will be able to sell their own fiber to commercial flax-spinning mills.

"Human skill" is a phrase which must constantly be used in speaking of the culture of flax. Clumsy handling of the flax straw in any one of the many stages it goes through before it is ready for the spinning machine may result in fiber of poor spinning quality. Heaviest demands on human hands come after the flax is pulled out of the ground. If the fiber is of the quality that may be used for fine yarns it is threshed. If it is of poorer quality and is to be used for upholstery tow, the threshing process is omitted and done later by the machine making the tow. Long flax fibers are used in spinning "line" yarns for the best linens; "tow" yarns, used in coarser weaves, are made from the short fibers. Great care must be taken in the threshing process so that the straw is not broken and yet all the seeds are removed. After threshing, the straw is retted—or rotted. Either it is spread on the ground and exposed to the weather for from 1 to 3 weeks or it is placed in huge water tanks until the gums in the plant which bind the fibers to the wood dissolve and the tiny tissues surrounding the fiber disintegrate. Breaking and scutching are the last two stages to which flax straw is submitted before the fiber is finally released from the straw.

From the scutching mill the flax fiber is ready to be taken to the flax-spinning mill. There are about 17 flax-spinning mills in the United States. Three of them, located on the Pacific Coast, use almost all the fiber that is produced in Oregon.

Flax fiber is hackled or cleaned when it reaches the spinning mill. The last slivers of shives are removed from the fiber, and the fiber is combed free of tangles, and then passed through drawing frames to be straightened and combed some more. Then at last it is ready for the spinning machine which twists it into yarn for cloth or thread. The finest yarns are wet-spun—passing through hot water before they are twisted. The sturdiness of linen yarns makes them the base for the most delicate laces and for materials to be given hard wear, such as the covering for airplane wings and fire hose. Today machines guarded by watchful eyes do most of our spinning for us. But yarns for the finest laces and for deluxe linens are still spun by hand. American machine-spun yarns are used mostly in the making of toweling, twines, and thread.

The spinning of fine linen yarns and the weaving of fine linen is still a technique dependent on skilled hands rather than the mechanical perfection of the machine. In certain sections of Ireland, Scotland, northern France, and Belgium, men and women have been working with flax for years. Their deft fingers "have a way" with yarns unexcelled by machines. It is from these countries that we import our finest linens.

The art of turning flax fiber into cloth has been practiced for at least 8,000 years, but it was not until the power loom and the flying shuttle began to be commonly used in the cotton industry that machinery for manufacturing linen was invented. Machines for spinning and weaving linen are similar to those for cotton, but they cost about four times as much. Flax fiber is not as flexible as cotton and is inclined to break, thus necessitating expensive additions to stop the machine automatically every time a thread is broken. The inelasticity of flax fiber makes it more difficult to weave into cloth than cotton and also to weave into cloth of various patterns. The principal linen weaves are the plain weave used for clothing and embroidery linens, twill weave for heavy fabrics, and satin weave for damask table linen.

When linen is finally loomed it goes through at least three finishing processes—bleaching, beetling, and calendering. Today most linens are bleached by chemicals, though the best quality linens are still grass-bleached. In the beetling process the dampened cloth is passed between wooden rollers and beaten with hammers until the threads have a uniform thickness and luster. The calendering process presses the cloth, giving it a smooth surface and extra glaze.

A fine linen thread runs through the history of mankind. Egyptian nobles wore skirts of sheerest linen, the Greeks and Romans valued linen as a rare and costly material. Today fine linen is still an aristocrat among fabrics, haughtily lending its name to many commodities made of cotton. Most of the sheets, many of the towels, napkins, and tablecloths which we call household linens are made of pure cotton or of union yarns which are a combination of cotton and linen.

TIPS TO CONSUMERS

Two tests for identifying an all-linen from an all-cotton fabric: (1) A drop of glycerine on linen will leave a translucent spot; on cotton, an opaque stain; (2) When cotton threads are lighted they blaze up quickly and burn readily; linen smolders slowly away. Hold a linen fabric against a strong light (3) to see that "filling" and "warp" threads are well balanced, if you want a strong fabric. First signs of wear are usually in places that have been creased; avoid ironing folds in your linen cloths.

Though linen combines satisfactorily with cotton for many purposes, linen has qualities peculiar to it alone. It is because of these qualities that it has held its own against its cotton competitor. Though linen wrinkles easily, it is a favorite hot-weather material for clothing. It is known as a cool fabric because it absorbs moisture readily and water evaporates from it quickly. Linen is considered a material *par excellence* for tablecloths and towels. It does not lint as cotton does. It does not soil as quickly. It is more absorbent. Linen stands up well under constant use. Careful laundering increases its brilliancy and glossy, leathery texture. First signs of wear are usually in places that have been creased. In ironing, linen should not be creased in the same place each time.

Today, because so many cottons are chemically treated to look like linen, it is sometimes difficult to tell whether a material is pure linen until it has been laundered several times. Such a test is of little help to the consumer when she is buying a tablecloth. Because water goes through linen rapidly and is slow to penetrate cotton, a wet fingertip was used by shoppers of old to test their linen. Today this test is not very reliable. Some cottons are so treated that they absorb water as quickly as linen. The oil test is still fairly accurate if the fabric is all linen and is being compared with an all-cotton material. A drop of glycerine on linen will leave a translucent spot; on cotton the stain will be opaque. Knowledge of the difference between a cotton thread and a linen one is perhaps the best way to distinguish between the two materials. Linen threads are tenacious. If broken, they stay somewhat erect and the fibers cling together. A cotton thread goes limp and its ends spread out in all directions. When cotton threads are lighted they blaze up quickly and burn readily. Linen smolders slowly away.

Durability and serviceability of linen varies with the quality of the material. Federal specifications for table linen, used as the guide when the Government buys linen, are based on the kind of fiber used, the percentage of dressing, amount of bleaching, the weave, size of hem, the minimum thread count, weight, and tensile strength of the fabric.

A heavy linen gives the best service. Weight of linen, however, should be due to weight of the flax fiber and not to dressing. Bleaching weakens linen. Though a snowy-white tablecloth which has been full-bleached is elegant, for hard wear hotels and institutions prefer half-bleached or three-quarter-bleached cloths. Laundering carries forward the bleaching process.

Firmness of weave is an indication of durability of linen damask. Damask of top quality has as many as 450 threads per square inch. Hotels which give their linens hard wear usually buy damask with a thread count from 160 to 270. Balance of weave is also important. Filling threads usually wear out before warp threads. A damask may have a good thread count, but if the weave is unbalanced it will not be so desirable. As information of this type is not given on retail labels, the consumer must still depend on her own eyes. By holding linen against a strong

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COUNTING CALORIES

Weigh in age, size, and muscular activity when you count up the calories your diet should provide

POWER to flick an eyelash, to play three sets of tennis, to push a pen, comes from the food we eat. Take a mouthful, and the digestive process begins and continues until the morsel, broken down into various substances, is transformed into energy to work, to play, and even to sleep.

Carbohydrates (sugars and starches), fats, and proteins are known as fuel foods. As they are oxidized or burned in our bodies, they give off heat and energy which enable our bodies to function. They are as essential to us as gasoline is to an automobile.

Most foods are a mixture of one or more of these energy-yielding substances; of cellulose, or plant fiber, a form of carbohydrate which has little or no fuel value; and of minerals, water, and vitamins. The latter four are essential to us as body regulators and body builders but not as sources of energy.*

Watery fruits and green and leafy vegetables which we must have in our diets for their mineral and vitamin content as a rule are the lowest in fuel values. There are only 103 calories in a pound of tomatoes and 285 in a pound of apples, while a pound of sugar has 1,814 calories, and a pound of butter, 3,488.

Consumers do not buy their foods by calories, but a mother when thinking in terms of preparing a "filling" or "substantial" meal for her family soon learns from experience that the carbohydrates and proteins in the meal have the greatest "staying qualities", though she may not think of them as fuel foods or in terms of calories.

The calorie is a unit of measurement nutritionists use for determining the amount of energy in various foods. It is simply a standard for measuring heat, just as the inch is a measure for length and the pint for volume. Technically, one large calorie is equal to the amount of heat it takes to raise 1 kilogram of water 1 degree centigrade. As the chemical processes are similar when food is burned either inside or outside of our bodies, nutritionists have been able to gage just how much energy is released by the burning process. For this purpose they use a special machine called the calorimeter which records the exact amount of heat released by the oxidation of any type of food.

Armed with these definite data on how much fuel value different foods contain, nutritionists have gone one step further and studied the problem of how much fuel we burn doing different types of work. For these tests they use a respiration calorimeter which is large enough for a human being to live in during a testing period. Thanks to these two devices, today we have exact calculations based on hundreds of experiments which tell us the average number of calories a child and an adult need a day, depending on the type of life each one leads. These are supplemented by exact information on the energy yield of various foods.

Fat is the most concentrated of all energy foods. A man with a sedentary occupation who requires only 1,800 calories of fuel a day could get this whole amount by eating a little over a half of a pound of butter. But he would quickly regret it. Fat is the hardest of all foods to digest. It leaves the stomach more slowly than other foods and tends to retard digestion of other foods. For this reason, too, a great percentage of fried foods in the daily diet, especially in that of children, should be avoided. As a general rule, the amount of fat we eat should depend on the type of work we do. Farmers who do strenuous work can use more fat in their diet than a man who sits at a desk all day. The fat not immediately burned as fuel is stored in our bodies for an emergency. The length of time a man can go without food depends to a great extent on the amount of fat he has tucked away. This reserve fat also serves us in other ways. It acts as a protective pad for many of our organs and also as an insulator—protecting us from too great a loss of our body heat. Our chief sources of fat are butter and cream, other animal fats, and fats from nuts and seeds such as peanuts and cottonseed.

Sugar, as a form of concentrated energy, comes next to fat. In the form of glucose it is always present in our blood. When our blood has the required amount, sugar is stored in the liver in the form of glycogen. When this storehouse is full and we still eat sugar, our bodies transform it into fat and store it away. Besides getting sugar from the juice of the beet and from sugarcane, we get it in sweet fruits and vegetables, such as grapes, oranges, corn, peas. Sugar is more easily digested than any other food and is a quick source of energy. For this reason, hikers will carry with them a chocolate bar or raisins, high in sugar content, to tide them over until they have a meal. As a rule, though, the proper time to eat sugar is at the end of a meal, for, though it is a quick-burning fuel, it blunts the appetite for other foods we need. If eaten in excess, it will irritate the lining of the stomach.

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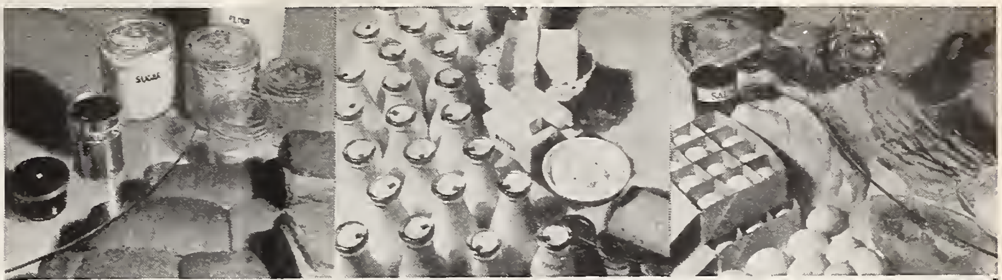
*For the importance of vitamins in the diet, refer to CONSUMERS' GUIDE, vol. III, nos. 8, 10, 11, 12, and 14; for minerals, vol. III, nos. 19, 20, and vol. IV, no. 9; for water, vol. IV, no. 8.

Starch is the fuel food standby for most people. Because most starchy foods are cheap foods, the poor of the world rely on them as their chief source of energy. The nutrition problem for people with too low incomes is often one of a diet with too much starch and too little of the foods with vitamin and mineral content. We digest starch more slowly than we do sugar but faster than we do fat. Like fat, starch has a satisfactory staying quality. Many nutritionists say that one-third of our daily calorie portion should be in starchy foods. In the digestive process starch is first turned to sugar and then turned to fat.

"Holding first place" is the literal translation for the Greek work *proteios* from which we derive our word protein. This important substance which we find in milk, fish, eggs, cereals, nuts, peas, and beans serves us in two ways. Like carbohydrates and fats it can be burned as fuel—but because of the nitrogen it contains it is not as economical a body fuel as starch, sugar, and fats. Before a protein can be used as fuel, it must be freed of its nitrogen. In a sense the nitrogen content of protein makes it a liability when we depend too heavily on it for our fuel supply. It is best not to laden a menu with calories derived from protein but for the majority of our fuel supply to depend on the carbohydrate foods. However, this very nitrogen which is of no use to us as a source of energy is invaluable in building our bodies. It is only through the protein foods that we get nitrogen which is essential to every living cell. (For the importance of protein as a body builder see CONSUMERS' GUIDE, vol. III, no. 16.)



YOUR PENNY'S WORTH IN CALORIES

A penny spent for each of these foods will buy the number of calories shown below. But remember: Meals made up *only* of bargains in calories may be easy on the pocketbook but hard on health. Many low-fuel-value foods, high in other nutrients essential to building and maintaining sound bodies, should have a part in any well-balanced diet.*

1c worth	Calories
CEREAL PRODUCTS	
Flour, wheat	321
Corn meal	289
Hominy grits	247
Rolled oats	240
Rice	187
Cereal, wheat	117
Corn flakes	107
Macaroni	105
BAKED GOODS	
White bread	131
Rye bread	123
Whole-wheat bread	116
Soda crackers	102
MEAT PRODUCTS	
Lard	238
Salt pork	139
Bacon strip	81
Picnic pork	53
Pork, loin roast	40
Leg of lamb	27
Beef, round steak	16
Veal cutlets	12

1c worth	Calories
DAIRY PRODUCTS AND EGGS	
Butter	87
Cheese	67
Eggs	18
FRUITS AND VEGETABLES	
Navy beans, dried	145
Prunes, dried	109
Potatoes	108
Sweetpotatoes	80
Bananas	47
Corn, canned	42
Apples	31
Cabbage	21
SWEETS	
Sugar	324
Strawberry preserves	45
OTHER FOODS	
Peanut butter	136
Chocolate	81
Pink salmon	67

*Estimates based on average United States food prices for June 15, 1937.

CHERRY RIPE

Cherry pie prospects are good if consumers keep up with the record crop forecasters predict for this year

Early in July the President of the United States received a present of a pie. It was a huge pie, plump with juicy cherries, and was brought by airplane as an edible invitation to a cherry festival about to be held in the heart of the largest sour cherry producing section in the world—the Grand Traverse Region of Michigan. With this start, the jubilee got away to its exhibitions, contests, miles of parades.

As far as production goes, cherry growers have reason to stage a celebration this year. Production barometers indicate fair weather, with the 1937 crop of sweet and sour cherries in the 12 commercially important States topping the previous 1932 record. Estimates set the crop at about 144,600 tons as compared with 115,000 in 1936 and an average of 116,700 during the 5 years from 1928 to 1932. A fine sour-cherry harvest takes the credit for these gains, since the sweet-cherry varieties suffered heavy losses from rains during their pollination period.

Real reason for rejoicing comes when cherry growers receive high prices for a large crop. Production, after all, doesn't mean money in the bank for farmers if there is no demand for the thing produced. Last year consumers wanted cherries and were willing and able to pay well for them. Farmers, therefore, received the good price of $76.73 per ton; farm value cleared the $8,000,000 mark. We don't know yet whether or not cherry growers will have tough sledding this year in disposing of the larger crop.

Cherries have never seriously competed with the apple and orange for a first place in commercial importance. First place in sprightly flavor they yield to no other cultivated fruit. Cherries are valuable, too, as sources of vitamins A and C. Neglect the latter vitamin and you increase your chances of having poor teeth and high dentist bills.

Two species, natives of Europe and southwestern Asia, give us almost all our cherries—the sour, sweet, and Duke varieties. *Prunus cerasus* is ancestor of our light and dark sour cherries. From *Prunus avium* developed our sweets. Duke cherries are probably hybrids, standing halfway between the sweet and sour groups. Other cherry species are grown, though not for their fruit. The Mahaleb provides hardy stock upon which to bud cultivated varieties. To the bird cherry we owe thanks for the pleasant reddish wood of our early American tables and corner cupboards. Several Japanese species are cultivated as ornaments. The riotous blossoms of these Kwanzan and Yoshino trees are responsible for drawing crowds of tourists to our National Capital in the springtime.

Though thousands like to feast their eyes upon a foaming sea of white and pink cherry blossoms, many more thousands prefer to feast directly upon cherry fruit. Hence the popularity of our Richmond, Bing, Lambert, Royal Ann, and Montmorency varieties. Growers' lists have been blue-penciled until they include only a few standard cherry varieties. Consequently cherry growers can plant an orchard with some assurance that the harvest will meet market demands. Consumers profit by this practice, since they are then pretty sure of getting cherries of uniform taste and size.

Among sour cherries, the Richmond deserves attention because of its early ripening and its hardiness. Except for these claims to fame, the Richmond would long ago have been cut out of the running by the Montmorency—a medium-sized red cherry in great demand with canners.

All sour-cherry varieties are used primarily for pies, sauces, and preserves. For luscious cherries to be eaten fresh, consumers look to the sweet cherry. Sweet cherries fall into two classes—the Hearts and the Bigarreaus. Hearts have tender flesh and a characteristic heart shape. Bigarreaus, with their spheres of firm flesh, pack better than the Hearts, though they can't hold a candle to Hearts where flavor is concerned.

Black Tartarian is a heart cherry widely grown for home consumption because it thrives under a wider range of soil and climatic conditions than most other sweet cherries. The fruit is rather small and dark-purplish black.

On the basis of quantity of fruit produced, Windsor steps up for a word of praise. This Bigarreau-type black cherry is the best selling midseason variety grown in the East. The fruit is very dark red, turning black upon maturity. While not as fine in dessert quality as the Black Tartarian, it is a popular market sort and ships well.

Napoleon, or Royal Ann as it is known west of the Rockies, is *the* one white-fleshed sweet cherry of commercial importance. No midseason variety seems able to fill its place in spite of its handicap in producing fruit that is inclined to crack before reaching maturity. Consumers who sit down to a dessert of canned cherries at the table more than likely will be eating these big, yellowish cherries, blushed with varying shades of red. For the Royal Ann is the one sweet cherry that comes into its own as a canned product or processed maraschino cherry. Although the flesh is firm enough to warrant shipping as a fresh fruit, the Royal Ann stays right at home because consumers prefer the large, glowing, dark varieties.

The Duke varieties—the May Duke, Late Duke, etc.—find a ready sale at local markets, but they don't ship long distances well.

Consumers who find fresh cherries at market do well to remember that quality comes when cherries reach their full maturity on the tree. Unlike many other fruits, the cherry stops developing as far as color and flavor are concerned as soon as it is picked. To tell whether a cherry is tree-ripe, look for a bright, fresh appearance, clear color, and plumpness. Best quality cherries are juicy and have a well-developed flavor. Whatever their actual price, reject as costly immature cherries that are hard or shriveled. Don't put stale fruits in your market basket, either, since these will be soft and shriveled.

Examine cherries closely for worm injury and decay. The latter often takes the form of small, brown, circular spots on the fruit. A stained and leaky box often shows that decay has softened the fruit. If cherries have been bruised or mechanically injured, molds develop readily at the point of injury. That is why cherries that are to be eaten fresh should be bought with their stems on.

As in the case of other fruits, the United States Department of Agriculture has set quality standards for fresh and canned cherries. Grades for the fresh fruit benefit the consumer only indirectly since no mark appears on the fruit. Grades for canned cherries frequently appear on the can label, and thus prove of considerable help. Canned red sour pitted cherries which are large, plump, and of fine color are classified as U. S. Grade A (Fancy); other grades are U. S. Grade C (Standard) and Substandard. Canned sweet cherries, both pitted and unpitted, run through a wide range of grades—U. S. Grade A (Fancy), Grade B (Choice), Grade C (Standard,) and the below-standard grades, D, E, and F, the latter known as "pie pack" cherries.

Canned sweet cherries are sometimes packed without sugar for hospital use. These may belong to the A, B, C, or D grades, but will bear on the container the additional statement "Unsweetened Cherries in Water" or "Water Pack Cherries."

Box the compass to find where cherry trees grow in the United States. More than 11,300,000 trees of bearing age dot the map, with every State contributing its quota. Michigan is champion cherry-growing State with more than 2,250,000 trees—double the number credited to its nearest competitor, New York. California boasts of at least one million trees, while various States grow about half that number. Florida trails the field with its 175 cherry trees. This is natural since cherry trees languish where summers are long and hot and winters too mild to induce the complete dormancy necessary for the required rest period. For that reason, rule out the South as cherry-growing country. Figures are somewhat deceptive when it comes to cherry trees, since they are based on commercial cherry growing; in some States trees are grown in small orchards and the fruit finds its way to local markets only.

Trace a line down the Rocky Mountains and roughly you divide the country into the sweet cherry producing region to the west and the sour cherry to the east. New York Michigan, Pennsylvania, Ohio, Colorado, Wisconsin, and Iowa are famous for their "pie" cherries. Some sweet cherries invade this territory, but generally the sweet cherries stay in the warmer, lighter soil and the more favorable climatic conditions of California, Oregon, and Washington.

Most of our cherry crop goes to the cannery, with sour cherries far and away in the majority. Bakeries offer a huge outlet for canned sour cherries for pie making. Like as not even in cherry season cherry pie on the menu will be made of the canned product. Almost all sour cherries are pitted and canned in water with no sugar. Preference is growing, however, for cherries prepared in another way—pitted and packed in barrels which are then stored at a temperature of 10 to 15 degrees Fahrenheit. Bakers like these frozen cherries for their popular cherry pies. Sweet cherries when canned are put up in sirup with their pits.

Redder than any artificial cherry on a woman's hat, is the imitation maraschino cherry used in icings, ice cream, and as garnishing. Maraschinos are manufactured almost exclusively from the sweet Royal Ann. Until the Tariff Act of 1930 began to shut out importations of cherries with its high duties, American manufacturers counted on Italy to supply most of the brined and sulphured cherries suitable for making imitation maraschino and glaceed cherry products. Since 1930 they have found their cherries at home, and yearly call for more than 5,000,000 pounds of cherries for this thriving business.

Process of manufacturing our imitation maraschino cherries consists in placing the cherries in brine and bleaching them with sulphurous acid or sulphur dioxide fumes. Stemming and pitting come next. After a thorough washing, the cherries are put in sirups of increasing density. A brilliant artificial red dye is then applied, the product artificially flavored and packed in sirups. For the glacé or candied cherries often found in fruit cake, cherries are saturated with sugar, then allowed to drain.

Consumers who ask for maraschino cherries at the grocer's will get just what they expect—the brilliant red globules that soda clerks balance inevitably on the top of a nut sundae. Consumers won't be getting true maraschino cherries, however, for that term applies only to marasca cherries preserved in a liqueur prepared from the same fruit. And the marasca cherry grows only in the Yugoslavian province of Dalmatia.

Labels upon our so-called maraschinos, bear some such phrase as "Imitation Maraschino Cherries." The Food and Drug Administration of the United States Department of Agriculture protected consumers against misrepresentation by a decision that only the true marasca cherry could bear the label "Maraschino Cherries." Royal Ann cherries flavored with maraschino alone may be called "Maraschino-flavored Cherries"; if packed in maraschino liqueur they may be branded "Cherries in Maraschino." Products flavored in imitation of maraschino must bear the word "Imitation."

With a tree as with a human being, the care given in the first years of life is crucial. Proper pruning has much to do with tree futures. Pruning to an open center allows air and sunshine to reach the branches of these sour-cherry trees, means that fruit will ripen evenly.

More news from the consumer-farmer cooperative front in four States

OHIO.—Up to a new high goes the volume of Farm Bureau cooperative activities in Ohio. First 4 months of 1937, according to Farm Bureau records, indicate new records in the distribution of farm and home supplies. Automobile insurance coverages showed an increase of 47 percent over last year, fire insurance climbed to 85 percent over last year. Cooperative purchasing volume increased for every article handled, and cooperative marketing jumped encouragingly. Potatoes particularly are on the march; 450 thousand bushels of potatoes were marketed cooperatively this year. Cooperative potato marketing began in Ohio back in 1934, when huge surpluses clogged up all commercial channels. Now, no stopgap, cooperative potatoes get premium prices on most markets. . . . Ohio will be dotted with cooperative conferences and institutes this summer. The Educational Division of the Farm Bureau Cooperative Association announces that it will sponsor 15 camps this summer. Six are for youths, three for farm women, three for co-op managers, and three for office employees and publicity directors.

Not a cooperative commonwealth but almost a cooperative county, Clermont County, Ohio, now has 2,500 farm cooperators out of a possible 3,600 farms. To supply cooperators' needs the Clermont Farm Bureau Cooperative Association now has four large warehouses, a coal yard, a building materials yard, and a monthly newspaper. . . . Butler County cooperators were late in coming into the cooperative movement. However, its cooperative, organized November 1936, has enrolled 685 members in less than 9 months. Business in the cooperative store soared from $337 in February to $8,300 in April, with receipts still going up and three trucks working overtime. . . . Rural electrification projects now under construction in Ohio will string wire 3,819 miles, supplying electricity to 13,495 farms in 25 counties.

PENNSYLVANIA.—Cooperative activities in Pennsylvania have been pressing ahead at a pace to cause the editors of the *Co-op Review* (official organ of the Pennsylvania Farm Bureau Federation) to reflect: "How many things are looked upon as quite impossible until they have been actually effected?" A million dollar cooperative in Pennsylvania seemed to be quite impossible 30 months ago, they say, but this year they think they are on the road to one. Sales of feed by the Farm Bureau to May 1, 1937, were 193 percent over last year; fertilizer, 52 percent; spray materials, 248 percent; spray materials, wet, 69 percent; kerosene, 43 percent; and gasoline, 40 percent. Total sales to May 1 were $139,000—122 percent over last year.

Are consumers going to see the familiar chain store transformed into consumer cooperatives? Right on the heels of the closing of 200 chain stores in Pennsylvania, following the passage of a chain-store tax, comes a proposal that these closed chain stores be converted into consumer cooperatives. Proposed by the Consumer Distribution Corporation, which will be the wholesale agency for a still nonexistent group of cooperative department stores, is a plan by which the closed stores would be sold to neighborhood consumers. The chain-store system would then act as the wholesale agency for the stores.

TEXAS.—Cooperators went down to meet the train at Hereford, Tex., to welcome the arrival of five new "Co-op" tractors, a full carload. These five "Co-op" tractors, built on specification of cooperatives, went to the Hereford Consumers Fuel Association.

WISCONSIN.—Insurance needs of Wisconsin's cooperative associations have led them to establish an Insurance Cooperative Agency. Member organizations put up $10 of a $25 membership fee in cash, pay the rest in patronage dividends. Not a mutual insurance company, the cooperative agency acts only as a broker for its members. By reducing premium and renewal costs, and by giving expert advice on insurance, it hopes to give member cooperatives better protection at lower costs. Wisconsin's housing and Rural Electric Cooperatives initiated the plan. Launched, the agency now includes 3 other cooperatives, has issued invitations to 75 others to join.

Madison, Wis., cooperators are going to apply Rochdale principles to Hollywood. The "New Theatre" there, a cooperative venture, intends to present daily motion pictures 3 weeks out of the month, legitimate drama in the fourth week. Tentative organization plans call for a $10 share subscription from each member with a limit of 10 shares to a member.

Sober stock taking is all too rare in some cooperatives, but Madison, Wis., cooperators know when to retrench as well as when to expand. Selling coal, coke, and wood from their own yards last year turned out to be uneconomic. Competition was keen and margins did not permit the employment of a fuel expert. This year they are beginning again with a contract to buy coal for members through an established coal firm. To insure efficient utilization of fuel by members, the cooperative now offers the services of a heating engineer. Other losses were incurred last year when the cooperative tried to keep three gasoline stations going. Overhauling has resulted in the sale of two stations, and the determination to keep one going profitably.

MILK FOR MILLIONS

[Continued from page 7]

small towns and on the far outskirts of large cities, is one in which the farmer sells the milk produced on his farm directly to other consumers. The third, the most important for most consumers, is the one which finds its final expression in the bottle of milk and the bottle of cream on city doorsteps in the morning.

Most farmers do their milking by hand, taking from 6 to 8 minutes for each cow. On a few farms, however, milking machines are used which mechanically perform the pulsating motions of the hands. Four rubber-lined cups are placed over the four teats of the cow and the machine draws the milk through a tube into a container. Cows are milked at least twice a day, usually night and morning, and yield from 4 to 6 quarts at each milking.

Milk is drawn directly from the cow into pails, then usually strained into large cans with capacities of from 10 to 40 quarts. Under good conditions these cans are taken to the milkhouse which is some distance from the dairy barn to avoid the danger of infection from dirt and dust. There, if the farmer is a careful one, the milk is cooled, sometimes by immersion in ice-cold water, sometimes by refrigerating systems, and sometimes simply by running water. At a regular time during the day the cans of milk leave the farm. Deterioration starts doing its damage when careless farmers let milk cans stand unprotected from the heat while awaiting collection.

Getting the milk from the farm to the city is the farmer's responsibility. Whatever the cost it comes out of his pay check. This is true when the milk is shipped directly into the city, as is about 50 percent of the milk going into St. Louis and all of the milk going into the cities of Connecticut, or when it is first delivered to a country milk station and then reshipped to the city, as is the case half the time in St. Louis and most of the time in Philadelphia and New York.

Transportation of milk, like the entire business of milk, has become a complicated, specialized business by itself with its own points of friction, its own technical problems, and its own special achievements. Milk is picked up from a roadside platform in front of the farm. From there it is hauled directly into the city pasteurizing plants or to a country receiving station. It may go by truck or train, part or all of the way. Trucking may be by the farmer himself, by his cooperative, by a farmer who serves all the farmers in his neighborhood, by an independent trucking company, or by a subsidiary of the milk distributor.

Today all forms of milk transportation give the front seat to the motor truck. Buffalo, Cleveland, St. Louis, St. Paul-Minneapolis, Columbus, Dayton, Kansas City, Louisville, Richmond, and San Diego receive all their milk by motor truck; many other cities receive almost all their milk by truck. Only two important cities still depend chiefly on trains: Boston, which receives 90 percent of its milk by train, and New York, which receives 63 percent by train. Some time in the future, some experts predict, trucks may give way to trains again as the chief vehicle for milk transport as more milk ordinances become standardized and milksheds are widened to include milk from any protected area. It is possible to deliver fresh milk by refrigerator cars from farms 1,000 miles away from a city.

Often hauling charges are a fruitful source of friction between farmer and distributor. Unfortunately rates do not always follow established rate-making principles. A study of milk in Milwaukee shows that the average cost for hauling 100 pounds of milk was 18.6 cents in September 1934, 23 cents in 1930. This study did not indicate the basis for the determination of rates, but a study by the University of Illinois of the St. Louis milkshed states that hauling rates there seem to have no relation to distance, to the state of the roads, or to any one of the other factors that might reasonably be expected to determine rates. Hauling charges per hundredweight for 12 miles on 15 different routes varied from 13 to 30 cents for no apparent reason. Farmers naturally resent the apparent inequity of the charges made against them for hauling milk.

Federal Trade Commission experts during a study of milk in 1935 and 1936 authorized by Congress discovered instances of dealers taking a profit on services performed for producers. In Baltimore, Cincinnati, Boston, and Philadelphia hauling charges levied on farmers by distributors exceeded the cost of hauling. Distributors' profits at the expense of farmers on this operation ranged up to one-fourth of a cent a quart in these cities. In Philadelphia distributors charged farmers for hauling some milk which was not hauled at all. In Boston and Baltimore the amounts charged to farmers for putting milk through the dealers' country stations exceeded the cost of the operation. These practices, the Commission said, are unfair and should be discontinued.

Milwaukee's Common Council with the cooperation of the CWA, the FERA, and AAA experts studied almost every aspect of the milk problem of Milwaukee from 1934 to 1936. Two objectives of the study were, first, to examine the leakages and inefficiencies of a competitive milk economy; and, second, to consider the establishment of a public milk department for the distribution of all milk in Milwaukee.

Counting up all the factors in the hauling situation, the Milwaukee investigation discovered that 143 haulers in the Milwaukee milkshed stopped at 2,597 farms to collect milk. Wastes showed up startlingly. To get to the 2,597 farms they served it was necessary for these 143 haulers to pass 2,852 dairy farms. Hauling in this case, and Milwaukee is not exceptional, becomes something like playing leapfrog, with a hauler collecting from one farm then skipping a farm, while right behind him another hauler follows, collecting from the farms that have been skipped, skipping the farms that have been served. One trucker passed up 55 farms to make collections at 9 farms. Trucks devoted to milk hauling were used only to 60 percent of their capacity.

People who don't keep their appointments on time are a nuisance, but when trucks and drivers must stand around and wait for attention at a milk plant, not only is it a nuisance, it is a waste of money and resources. To haul their milk daily into Milwaukee truckers had to spend a total of 937.2 working hours. Of this time they had to stand around and wait 195 hours. For every 5 hours the haulers worked, they had to loaf more than 1 hour.

[Continued in our next issue]

LINEN CONSUMERS ARE LUCKY

[Concluded from page 11]

light one can get some idea of firmness and balance of the weave.

Damask linen is called single or double depending on the technique used in weaving the design. The design is made by carrying the warp thread over several filling threads. In single damask the warp thread floats over four filling threads and binds the fifth thread, while in double damask the warp floats over seven filling threads and binds the eighth. Because more yarns are generally used in the filling in double damask, it is usually considered to give the best wear. Here again firmness of the entire weave is important. Double damask designs used to be reserved for fabrics of the finest weave, but today there is a tendency to use them on loosely woven materials. When the double technique is used on a loose weave, the floating threads tend to catch and break.

STUDY QUESTIONS FOR THIS ISSUE

1. Where does the milk you buy come from, geographically speaking?
2. Does your local milk ordinance limit the area from which milk sold in your community may come?
3. What is "surplus" milk? What proportion of the milk produced in this country is classed as "surplus?" Why does "surplus" milk present problems?
4. What was the purpose of the earliest types of milk regulations?
5. What was the original purpose in passing our present type of milk ordinance?
6. What kinds of safeguards should be taken to see that milk is kept free of contamination?
7. In what way can milk ordinances and their enforcement go beyond their original purpose?
8. Does the Federal Trade Commission recommend any changes in the present local control of milk supplies?
9. What are the advantages to be gained from standardizing milk ordinances throughout the country?
10. Who pays the cost of hauling milk from the farm to the processor?
11. What kinds of difficulties have farmers had over this cost?
12. What is one way by which this cost might be reduced?
13. What are some reasons why we import much of our flax fiber and linens?
14. What is AAA doing to help American farmers to produce flax?
15. Why are calories not an adequate measure of food values?
16. What are the crop prospects for cherries this year?

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●

CONSUMER TIME ON THE AIR

via the National Broadcasting Co. red network has been changed to 1:30 p. m. eastern standard time (not daylight saving) every Wednesday. Tune in on your Consumers' Counsel and a representative of the General Federation of Women's Clubs. They talk about what's happening to food supplies and prices; how you can get your money's worth in foods and other agricultural products; what consumers are doing to make their dollars stretch farther. Find out from your local N. B. C. station the hour when this program is broadcast in your city. It will give you timely advice on pocketbook problems.

U. S GOVERNMENT PRINTING OFFICE 5295

CONSUMERS' Guide

VOLUME IV, NUMBER 11 AUGUST 23, 1937

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MAPPING THE ROUTE TO PLENTY

CONSUMERS' Guide

Issued every two weeks by the Consumers' Counsel, Agricultural Adjustment Administration, Department of Agriculture, Washington, D. C.

VOL. IV, NO. 11 AUGUST 23, 1937

THERE'S punch in this farm woman's challenge to city and rural women to get together on producer-consumer problems. She's Mrs. Charles W. Sewell, administrative director of the Associated Women of the American Farm Bureau Federation. "I wonder", Mrs. Sewell asks, "if city folk know how many enemies we combat to produce the foodstuffs for the average city table. I fear sometimes that many feel as did the bride who, hearing of a proposed farmers' strike, said complacently, 'Let the rubes strike if they want to. I can get everything *I* want at the grocery store.'

"Start with the orange juice on the breakfast table. Long hours of tedious hand labor and intensive cultivation go into producing and harvesting the golden fruit. Expensive spray materials and fertilizers must be purchased and applied; and grading, packing, storage, and transportation charges come from the price the farmer receives.

"Next think of the bacon. Time was when hog raising was a simple process. Little thought or planning went into the job. Nowadays, it's a real art. A pig is no longer just a pig. The McClean system of swine management now in vogue throughout the Corn Belt, calls for care and equipment that surround a brood sow with more sanitary safeguards than are available to many mothers of men. Mary and Johnny may not receive the Schick test and toxin-antitoxin for diphtheria prevention, but few farmers are brave enough to let the hogs go without vaccination against cholera. In the days gone by, hogs grew on grass and acorns with a little corn thrown in; now, they must have minerals and vitamins, balanced with the precision of modern scientists and chemists. All this must be added to food costs.

"The egg that accompanies the bacon or ham comes from a flock of hens as temperamental as a prima donna. No longer does 'Biddy' roam over the fields in summer or roost in an apple tree in winter. She must be housed comfortably and fed the ingredients that go into egg manufacture, else she won't lay and all the inventions of modern discovery have as yet failed to have her lay the maximum number of eggs when prices are at their peak. . . .

"And when you spread on the butter or poured the cream into your coffee, did you say, 'I can't understand why the price of dairy products is rising?' Or did you discuss the long, long trail a-winding from producer to consumer? Did you think of the dairy farmer and his family, of the labor and expense involved in producing high-grade milk and butter? The necessity of tuberculin test in order that your family may be protected against infection, expensive equipment for cooling and bottling, and the extravagant system of distribution, all affect the price received by the farmer.

"I sat in a city apartment building a few weeks ago and counted the wagons of 10 different distributors plying up and down a single street.

"Whose fault is it? No one individual or industry can be indicted, but simply an accumulation of practices that have grown up since commerce and trade were begun in America.

"Who is going to change it? To use a slang phrase, it's 'up to the women.' The better understanding between urban and rural women, a study of government and its agencies by both groups, the understanding that will enable each to discriminate between facts and propaganda, a determination possessed by pioneer women to right wrong—all this can help to solve the mutual problems of producer and consumer."

COMMENTARY on the present status of consumer literacy: A large manufacturer of breakfast foods recently conducted a test sales campaign. Consumers were offered identical packages at two prices—a single package at 10 cents, two packages for 23 cents. The report of this test does not reveal whether or not it was conducted in different stores, but, however it was staged, results showed that 33 percent more packages of the breakfast food were sold at the 2-for-23-cents price than at 10 cents a package. . . . At least one of the "Three R's" for consumers should be READ THE LABEL.

COMMERCIAL fraud, says a prominent merchant, is very much like the weather; everyone talks about it but no one does anything about it. The exception which proves the rule in this case is the creation of an Advisory Council for the Prevention of Commercial Fraud. Outgrowth of an earlier conference attended by 300 civic leaders, the Council hopes to join trade groups, consumer organizations, Better Business Bureaus, and law-enforcement agencies in a united front to stamp out fraud. Among the organizations represented on the Council are the New York City Federation of Womens' Clubs and the New York State League of Women Voters. It is claimed that a toll of several billion dollars a year is exacted from consumers by frauds such as fake "sales" under captions of "going out of business", "wholesaler selling at retail", "loan" sharks, "trace your ancestry" game, "fortune telling" rackets, etc.

MAPPING THE ROUTE TO PLENTY

Representatives of governments, workers, and employers turn the spotlight on workers' need for better nutrition and agriculture's capacity to supply that need

A scientist tossed down a book he was reading the other day about the River Nile. Crammed full of important facts, this book represented the results of immense research about one of the great arteries of industry and trade. But to the scientist the book had a major flaw. The author had started his tale with the river's source, tracing its course from little headwaters down to the great wide mouth where the commerce of the world paused and passed. "The life of a river", said the scientist, "starts with its mouth. When a great story of the Nile is written, it will start there."

Where this story should start is harder to tell. It might begin with sleek-coated pink-eyed rats, for they are an essential part of its plot. It might start with the great experts in nutrition, without whose sharp eyes, keen minds, and patient research the story could not be told. Other scientists, inventors, technicians, who have sharpened our tools and refined our knowledge of how to produce, have their part in the story. Another beginning might take us back 18 years to the first of a series of great international conclaves. A paradox might start the piece—the paradox that depression made grim, of millions of hungry people looking on mountainous supplies of food which they could not reach, and of producers and machinery, ready to supply the things humans want, left idle and unemployed.

Stories should have their heroes, and no better start could be made on this one than to begin with its central character. He is a worker, any worker—a puddler in the steel mills in Youngstown, a coolie in Shanghai, a miner in Spain, a shoemaker in Czechoslovakia, an impoverished colored sharecropper in our own South. He is you. He is us.

Among us, happily, there are differences galore. Differences in the way we talk, in how we live, in what makes us laugh, in what we love. On the other side of the picture there are the things that are common to every one of us, and no one more important than this: We have to work to live.

Now the basis of good living means being free to enjoy certain kinds of things. To you living in an air-cooled house may be one of your ideas of a good life. To the Alaskan canner it might be a joke. Filet mignon may be your idea of good food; to the Chinese coolie it may taste worse than castor oil. The Czech shoemaker may like to wear ribbons around his waist; you, a belt. You like green peppers; we don't. Try your hand at listing the things you want for even modest living, and you will see how involved the list becomes. To do that for every worker everywhere would be a herculean task. One ingredient of well-being, however, would appear in every list: all of us want healthy bodies.

This is where the pink-eyed rats and the keen-eyed scientists come in. In hundreds of laboratories over the world these and other animals have been helping scientists to learn what makes for good nutrition and how good nutrition can build sound bodies. Generations of these animals have come and gone, and each one that has been studied by the scientists has made it possible for humans to be a little wiser about a major problem of their lives, to know what food can do to contribute to their health and well-being.

Most of us know by now that no food nor any set of foods in the world has a monopoly on the ingredients that build healthy bodies. A good diet for health does not have to include filet mignon. String beans in themselves are not important; it's what the food scientists call "nutrients" in food that, in the right amount and the right variety, make for a health-building diet.

Enough research has been done on these nutrients to give us fairly definite recipes, using an infinite variety of foods to fit each palate but balancing in the quantity and kind of nutrients bodies need, which will result in a healthy diet for the Chinese coolie, the Czech shoemaker, the sharecropper, you, and us.

Science is fighting through in its laboratories this troublesome, difficult problem of defining just one of the things workers want for the good life. It is drawing up standards that will be as true for those who live in Minneapolis as for those who live in Madagascar. They are not final and ultimate standards, because all the time research is refining and improving our knowledge of nutrition. But they are workable rules of health, ready to be put to use.

Knowing what is good for us and getting it are, bitterly enough, two different things. Science defines the first. It does more. It shows us how to produce the things that we want. Just as nutritionists have made great progress in the past two decades, experts in the technique of producing foods have gone shooting ahead, immensely increasing our capacity to get the kinds and amounts of foods we need.

There science leaves off, and economics takes on. So far economics has made a messy job of seeing that we get what we need. If we ever had any doubts about that, depression should have cured us. One of the reasons why, science suggests, is that we go after getting what we want hind-end to. Because we buy the things we want with money, getting more money becomes to most of us the thing most worth fighting for. But we can't eat money; we can't wear it; we can't live in it. And while a dollar this year may buy all the potatoes we want, next year we may have to spend $1.20 for this same amount of potatoes.

Building toward a day when all workers will get the kind of nourishment their bodies need is a kind of bridge-building job. On the one side we pile up the facts about the foods we want produced, how many, what kind, when they should come to us. On the other, we must know how to produce these foods. Between these, a two-way traffic span must be built. Building such a bridge for goods other than food is a more difficult job because we have not worked out yet any scientific body of facts on which to base human needs for such goods. But with foods it is possible to do a fairly competent job of stacking up the two towers of facts between which the span is to hang.

More pay may look better . . . but it's more goods that count.

Now, figures of speech such as this don't make copy. They are old stuff. There is news, thrilling and important, in this world-wide search for the answer to the tangled problem of how to get nourishment and enough of it to millions of workers. This news comes from Geneva, Switzerland.

Eighteen years ago the representatives of many of the nations of the world gathered together to talk about the difficulties of their working people. The workers back home were tired of war. They wanted peace. Out of the talk grew a plan for an International Labor Conference to which representatives of governments, employers, and workers would be invited each year. An International Labor Office, staffed with experts, would be permanently set up and serve the needs of the conference. A charter was drawn.

"Whereas", read the preamble of this charter, creating in 1919 the International Labor Conference, "conditions of labor exist involving such injustice, hardship, and privation to large numbers of people as to produce unrest so great that the peace and harmony of the world are imperiled; and an improvement of those conditions is urgently required. . . ."

And "Whereas also the failure of any nation to adopt humane conditions of labor is an obstacle in the way of other nations which desire to improve the conditions of their own countries" . . . we will attempt together to make recommendations to our various countries on how conditions of labor can be improved.

Year by year, since the creation of this International Labor Conference and the International Labor Office, the problem of building the foundations of peace by bringing about "humane conditions of labor" throughout the world has been talked about by the representatives of many nations, our own included, at the little city of Geneva, Switzerland. Resolutions have been adopted; "draft conventions" they are called. In 16 years, there have been 49; 44 nations have approved some of the principles in these conventions and made them rules for the protection of the workers of their countries. Most of the rules proposed have to do with limiting hours of work, providing insurance and protections of various kinds on the job, setting minimum wages, limiting child labor.

Depression gave a new twist to the thinking of these delegates. We have been talking, they said in effect, about the need for abolishing poverty, for raising the standard of workers' living. We have been trying to give a lift toward both by proposing to member nations legislation which will standardize conditions of and rewards for work and raise those standards to higher levels. But a living wage in Sumatra may be a starvation wage in St. Louis. What is a tolerable workday in Calcutta may be intolerable in Calgary. What is security for workers in Korea may be insecurity in Kalamazoo. What is a fair price in New Guinea may be a sweated price in New York.

Instead of tackling the problem solely from the point of view of income of workers and all the variables that involves, these conferees proposed, in substance, to look at it also from the point of view of workers as consumers of goods. "Start with what we know about adequate nutrition", they suggested. "From there, let us draw up a picture of the diets on which workers are now attempting to live and work. Against this, let's measure agriculture's capacity to produce the foods workers need. Such pictures as these will give us a chart of our problems, clear-cut, definite, measurable, in terms everybody can understand. In itself such a chart will not solve the problem of a decent living, but we will know better what to work toward. And in working toward that goal we may at the same time help to open the route to recovery for agriculture which, like labor, has suffered severely in depression years."

Thus was born one of the most important international research jobs ever undertaken. Years of patient digging into the records must come before any adequate results are at hand. But the first preliminary report is out. The International Labor Office has published a 250-page book, called "Workers' Nutrition and Social Policy", chock full of fascinating and provocative records.

No picture, this, of the malnutrition among *all* the people of *every* country surveyed. Only the diet problems of "those people who obtain their incomes primarily from the labor of their hands and brains and not from property" are examined. Even among this group, there are large omissions—diets of the unemployed and of agricultural workers, for instance. Because existing data require it, the study extends chiefly to industrial workers and their families in European countries and the United States. This selection of countries was not arbitrary but due to the fact that research on workers' diets affording a basis of comparison was there to be built on.

Even within this group of workers and of countries, gaps in knowledge show up. More must be learned of the effect on health of work conditions in mines, factories, and shops, before the picture of diet requirements is complete. Nutrition studies are needed to tell more about the influence of climate, race, and environment on food habits. Shortage of facts, too, appear in the records of actual foods consumed by workers in different occupations and by members of workers' families.

Despite such limitations, despite the fact that the data relate on the whole to the better-paid section of industrial workers, the researchers conclude that the facts they have brought together are representative of an important mass of workers and that "there would seem to be sufficient reason to accept some of the startling statements made within recent months by people in various countries of the wide extent and the serious character of the nutrition problem among the working population. And if the problem is serious with regard to workers at work, how much more serious must it be for large groups of unemployed workers."

Conclusion No. 1 that stands out sharp against the background of figures and statistics is that "large numbers of workers not only in impoverished or depressed areas but even in the most advanced industrial countries are inadequately nourished", and that this "condition is not just a depression phenomenon; it is found among many employed workers in times of normal business activity."

Conclusion No. 2, equally sharp to these explorers into international food problems, is that the "main ground for inadequate nutrition is not so much the ineffective use of existing incomes as the insufficiency of the incomes themselves, however wisely spent."

American experts in the Bureau of Home Economics of the United

Technically, say the researchers into workers' nutrition problems, agriculture in major countries is in a position to meet the requirements for foodstuffs for an adequate diet. Putting potentialities into practice is the economic problem facing nations.

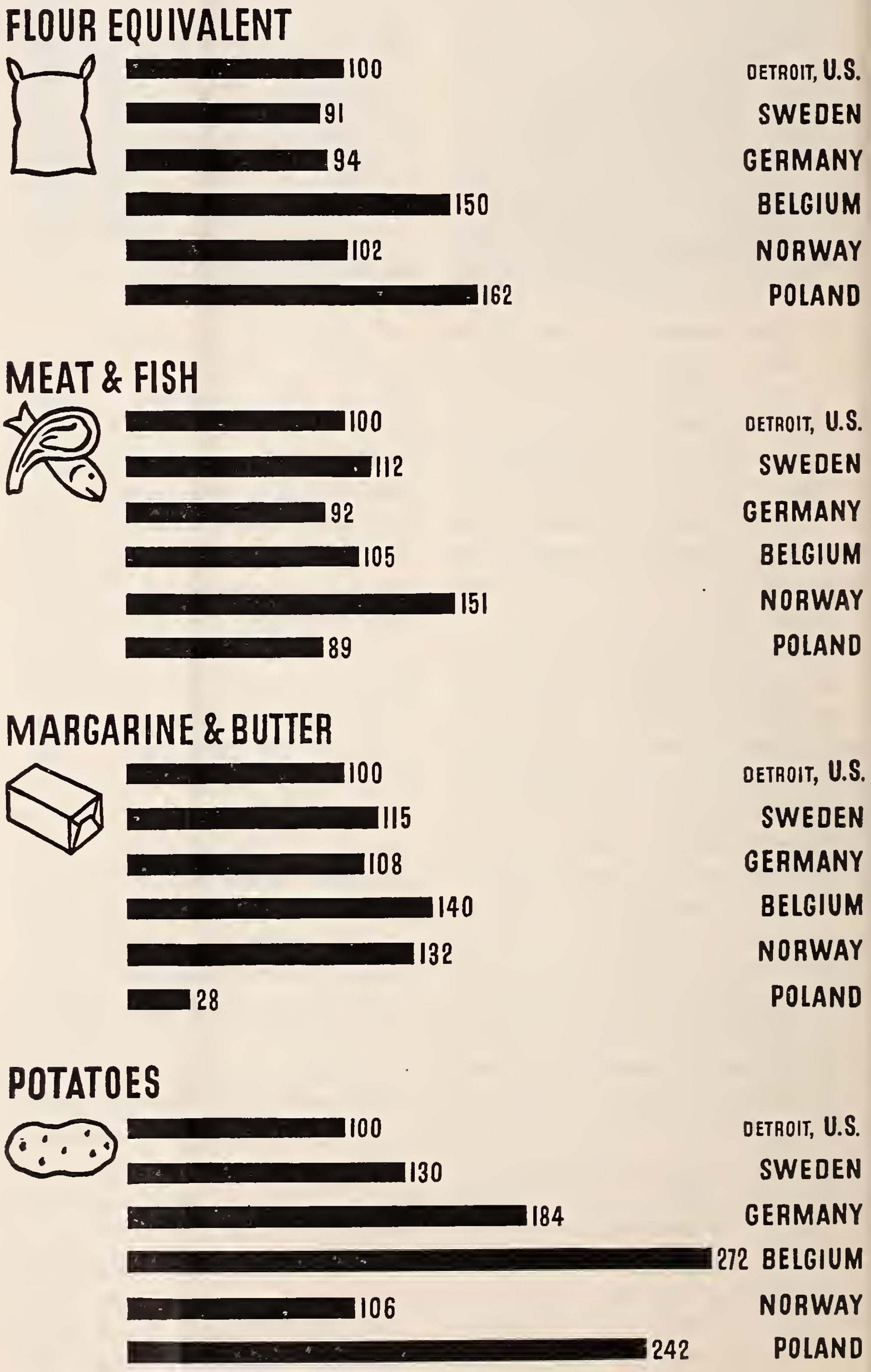
States Department of Agriculture, focusing their attention on the diets of workers' families in various regions of this country, would modify somewhat this Conclusion No. 2. (See CONSUMERS' GUIDE, June 14, 1937.) While they, too, found that the quality, as well as the quantity, of the diet tends to improve as workers' incomes grew, they also found that some workers achieve a good diet on little money, while others miss it with more money. Knowing and applying good nutrition rules, along with better incomes, they conclude, is an equally important route to well-being. American records show that below a certain food-money level no worker gets a safe diet, however carefully he may plan his expenditures; above a certain level practically all workers get a safe diet. Between these lower and upper levels are the great mass of workers, some of whom achieve good diets and some of whom fail to do so. Quite evidently in this group there is large need for educational helps in the wise selection of foods.

Variations in food consumption according to family income within the countries bear out the conclusion that more money means not just more food but better nutrition. Bread and cereals are among the cheapest ways to get calories. In Germany, Czechoslovakia, Belgium, and Sweden, the report shows, the amount of these high-calorie foods decreases as income grows. In Poland the amount increases with income at first, then drops off. Meats and fish are a relatively expensive way to get calories. All countries studied show that the amount which workers' families buy grows as income grows. Amounts of fats other than butter are relatively high at lower-income levels and lower at higher-income levels.

Protective foods—the kind that do more than give energy, that help bodies to grow strong and able to

How consumption of these foods by wage earners in Detroit compared with consumption by workers in other countries*

(This is an approximate picture only, based on as accurate studies as were available, for average quantities of foodstuffs consumed per "consumption unit." Studies were made at various times from 1927 to 1929 in all countries but Sweden; in Sweden, 1933.)



*Based on data in "Workers' Nutrition and Social Policy."

resist the strains—climb up with income. Milk, milk products, eggs, fresh fruits, and vegetables in most countries are more costly than the high-calorie foods, so they can find only a small place in diets that must be purchased with a few pennies a day. Only when those pennies are increased do protective foods have a better chance to appear on workers' tables.

In November 1935 a Technical Commission of the Health Committee of the League of Nations at a meeting in London laid down a certain number of nutritive requirements for an adequate diet. Significant items in these "London standards" are: (1) That a minimum of 2,400 net calories a day is essential for the maintenance of health of the average person not engaged in manual labor in countries of temperate climate; (2) that additional increments of calories must be supplied for various kinds of work ranging from 50 calories per hour for light work to 100 or more calories for heavy work; (3) that the number of calories must be supplied by a variety of foodstuffs, including about 70 grams of protein a day for persons weighing an average of about 154 pounds, and that part of such proteins must be of animal origin; and (4) that a sufficient quantity of minerals and vitamins must be contained in the diet.

Applying such yardsticks of adequate diet against the record of workers' food consumption, many grave conditions show up. On the score of calories—one useful device for measuring the quantitative adequacy of diets—low-income workers studied have hard going. The average number of calories in the diets of these workers is scanty for people who do moderately active work; for those whose work is heavy, the diets are more than slim in their allowance of calories. At the top wage levels studied, the average worker's daily diet was found to be safely above the 3,000 mark.

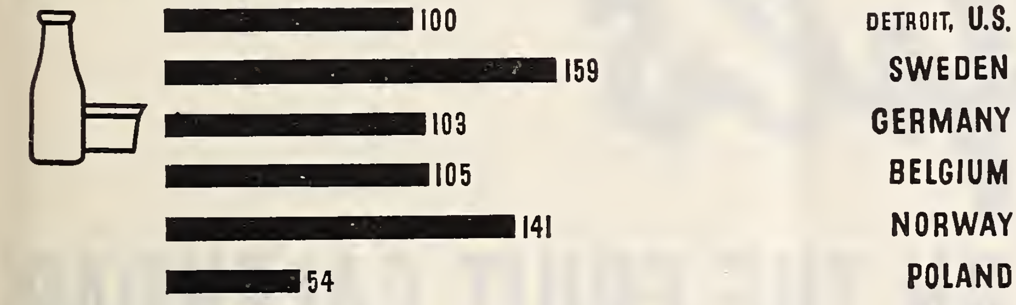
On the whole, however, the report concludes, "widespread deficiencies must by implication be supposed to exist even with respect to *quantities* of food consumed." As workers become better off economically, the report points out, the consumption of calories continues to increase "even in industrially advanced countries. . . . This, again, indicates that there is a considerable potential quantitative demand for food which would materialize in effective demand if the necessary purchasing power were put at the command of the groups concerned."

Workers' budgets in general throughout the countries studied show not only quantitative deficiencies but "also and above all a low consumption of protective foods." Not enough is known yet about these budgets to line up the record in cold figures, but the report states: "Even if one accepts the consumption of the more advanced countries as roughly adequate, great increases in consumption, particularly of the 'protective' foods, are required to bring the majority of other countries into line."

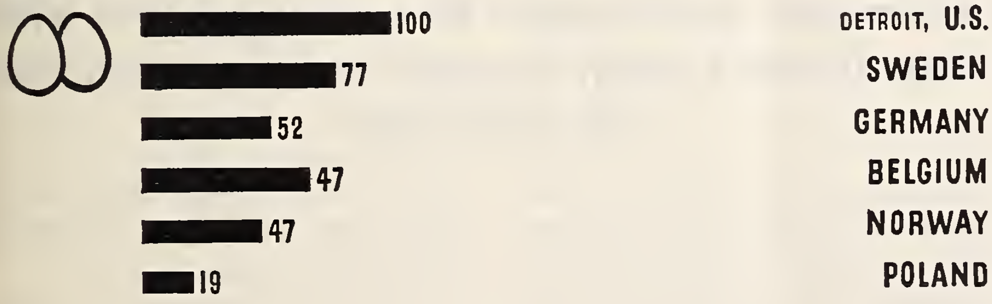
Tremendously important to agriculture, continuously searching for greater markets, is this picture of the great need for more and better quality of nourishment by the millions upon millions of workers. Significant, too, is the observation of the survey that when economic pressure

[Concluded on page 23]

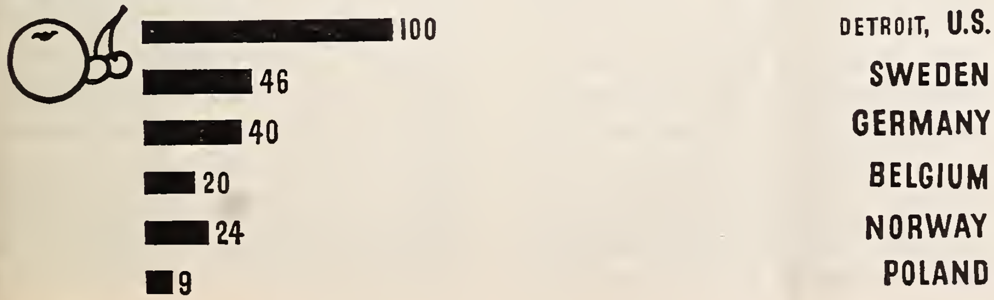
MILK & CHEESE



EGGS



FRESH FRUITS



Grapes ON THE FRUIT CALENDAR

September and October fill market baskets with their greatest supply of grapes for consumers who like them fresh

Long before geographers hit on the name of America for the New World, Leif the Lucky had christened it Wineland. He named it in honor of the native grapes discovered by his men as they explored the New England coastline. Had these Vikings pressed farther inland, they would have been even more struck with the aptness of their choice, for wild grapes grew from coast to coast.

With the cultivation of these native sorts and the growing of Old World wine grapes in California, grape growing strode into the ranks of big business. Repeal of the Volstead Act gave grape growing a boost, until it took fourth place among fruits in point of farm value. This year promises the largest grape crop since 1928, its tonnage touching the 2,500,000 mark. Over four-fifths of this harvest will come from a single State—California.

Part of this bumper grape harvest will go to wine vats. Part will be packaged as raisins or bottled as grape juice. At this particular season, however, grapes concern consumers mainly as a table delicacy—for they are coming plump and sweet to markets all over the country. Not only does their flavor appeal to flagging appetites, but grapes are nutritious. They contain 7 to 20 percent sugar, some Vitamin B, and a fair supply of iron.

Main types of table grapes are the European or *Vitis vinifera* grape varieties grown chiefly in California, and the American *euvitis* of the Eastern States. A third type, the Muscadine, grows widely in the South Atlantic and Gulf States, but doesn't play an important part in shipping. Look for this sort, well represented by the Scuppernong, in local Southern markets.

Vitis vinifera varieties have a higher sugar content than the American varieties. Because of this sweetness they make fine wine and raisins—in fact, no eastern grapes go into the raisin industry. Seeds separate readily from the pulp, though there is no getting skin and pulp apart. Running through a color range of red, white, and black, the more popular western table grapes are the Flame Tokay, Hamburg, Cornichon, Malaga, and Sultanina.

"Red, Father of Red"—that in translation is the Algerian name for the Flame Tokay—and admirably suited it is. Originating in Algeria, the Flame Tokay is one of the most extensively grown shipping grapes in California, though about equal quantities of Tokays, Thompsons, and Emperors are shipped from the State. Clusters are large, bearing fruits that are firm, though not particularly juicy. Red skin is medium thick and medium tough. It covers a greenish-white pulp that has a rather insipid taste—somewhat like sweetened water. October is the month for Tokays.

Two months earlier the Sultanina comes to market, better known as the Thompson Seedless—*the* seedless-raisin grape of commerce. The clusters run as long as 16 inches, though 10 would be nearer the average size. The oblong, medium-sized berries are light yellowish green in color, flushed when fully ripe and having a frosty-white bloom. The flavor is sweet, pointed up with a delicious nippy acid tang.

Crowning piece in many bon voyage baskets is a magnificent bunch of Hamburg grapes, the berries glowing round and coal black against their green leaves. The skin is thick and fairly tough, but the flesh is tender with an interestingly rich, aromatic sweetness. The Hamburg ripens in late September, but you can count on Hamburgs the year round if you are willing to pay the price, for they are grown more extensively under glass than any other variety.

To turn to the American *euvitis* varieties. These are derived mainly from native bunch species. Here again we have a color scheme of red, white, blue, and black. Unlike the western grapes, these eastern varieties have slippery globules of flesh that can be easily popped from their skins. Hence the name "slipskins." To some, these "slipskins" have an unpleasant musky or "foxy" odor—so-called because it resembles the odor of a fox. Many consumers, however, prefer eastern grapes because they are more refreshing, do not cloy the appetite as do their richer western relatives. Though there are few localities where some eastern grapes aren't grown, the largest supplies for table and juice purposes come from New York, Michigan, and Pennsylvania.

Native of Concord, Mass., the Concord grape—a variety of *euvitis*—is most widely grown of any on this continent. Its plantings reach to California. In the form of grape juice and jelly, to which much of it is converted, it can reach the most out-of-the-way hamlet. The berries are medium-sized with black skin dusted over with a blue bloom. The pale-green flesh, though sweet at the skin, is tart next to the seeds. Seeds cling tenaciously to the pulp, but pulp slips easily from the outer skin.

Champion American table grape in eating quality is the Delaware, with its sprightly flavor and agreeable aroma. Its clusters bear light-red berries covered with a lilac bloom. The flesh is of a transparent light green, tender and juicy.

Whatever their origin, grapes for table use should have certain characteristics in common.

First, they should have a fresh appearance—that's almost axiomatic for any fruit. They should be mature as indicated by their plumpness and high color for the variety and should be firmly attached to the stems. For juice purposes maturity is number one point of importance, but it won't matter whether or not the berries "shatter" from the stems provided they are not dried or shriveled.

High color for a variety means well-developed sugar content and good flavor. Some American grapes remain green in color even when ripe, but generally the white or green grapes of Europe and America turn amber when at their best.

Frost injures grapes, leaves the fruit rather flat in flavor. Western grapes injured by frost will have a dull appearance, become sticky, and shatter from their stems too readily. If such frost-nipped berries are picked, the brush—that is the bundle of fibers extending from the cap stem into the berry—is discolored and short.

Eastern varieties of grapes touched by frost shrivel. Pulp becomes milky in appearance. When such a berry is pulled from the cap stem, the brush often remains in the berry. However, you shouldn't be troubled with frost-bitten berries for another month or so.

Avoid decay in berries. This shows itself in mold and wet berries. Look over the berry container to see if it is leaky and stained—both indications of decay.

As in the case of other fruits, the United States Department of Agriculture has set up standards for eastern- and western-type table grapes and juice grapes. Though these are of more direct benefit to the trade than to individual consumers, buyers can get a good idea of what to look for in a grape by reading through the grades and definitions of terms as set forth in leaflets on U. S. Standards distributed free by the Bureau of Agricultural Economics, United States Department of Agriculture, Washington, D. C.

MILK PARADE

From doorsteps of city milk plants to doorsteps of city consumers, we explore—in this second of our series on Milk for Millions—the tangled web of prices and costs of this champion food*

TIME may march on, but milk flows down in a modern milk plant. Some plants may not harness gravity to move milk, may even process the milk completely on one floor, but by gravity or pressure pump, the steps that milk must go through before it is fit to drink are the same by modern health regulations. From the glass-lined, white-enameled storage tanks the milk flows through either a filter or a clarifier, which serves to remove from the milk all foreign substances which may have escaped detection until that time. The clarifier is a round drumlike tank inside of which the milk is whirled at high speed until it is clean.

Cleaned, the milk then tumbles through stainless pipes to the next process, preheating, where it is heated to a temperature of 120 degrees, preparatory to pasteurization.

Pasteurized milk is simply milk heated until harmful bacteria in it are killed. Today there are three methods of pasteurization: The flash process, in which milk is brought up to a temperature of 160 degrees for 15 to 30 seconds; bottle pasteurization, by which the milk is heated in the bottles; and the third method, the one which is in use in most cities, in which every particle of milk is heated to a temperature of 142 degrees and kept at that temperature for 30 minutes. The Standard Milk Ordinance of the United States Public Health Service recommends that the thermometer read 143½ degrees for the 30 minutes to insure complete pasteurization.

Historically famous microbe hunter, Louis Pasteur, nineteenth century French scientist, discovered the process known as pasteurization while he was trying to save the French wine industry from the ravages of uncontrolled fermentation. Fermentation was caused by bacteria, he discovered, and heat killed bacteria. By heating wine the bacteria could be killed, the fermentation controlled.

Epidemics in the nineteenth century led to the pasteurization of milk. First pasteurizers were ridiculed; many dealers advertised uncooked milk to minimize the advantages of the pasteurized kind. But slowly, surely, the gospel of pasteurization spread until now all large cities require the pasteurization of most commercial milk. Chief exception is certified milk which is not pasteurized.

Bacteria are as hard to generalize about as people. Not all of them are bad. The bad bacteria, the pathogenic kind, the evil harbingers of tuberculosis, undulant fever, septic sore throat, diphtheria, typhoid, and other diseases—all of these die at relatively low temperatures. In addition, however, there are good bacteria in milk, the lactic-acid bacteria. They help digestion and at the same time are the rank-and-file soldiers in the white hosts that fight disease bacteria in the body. Then, too, there are the "peptonizers", another group of bacteria that help to digest

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**First of the series appeared in our August 9, 1937, issue.*

food. These good bacteria fortunately have a greater resistance to heat than the disease-inducing bacteria. But if the milk is heated too much during pasteurization they, too, are killed, and some of the nutritive value of the milk is lost. Therefore milk must be heated not too hot, not too cold.

Milk for pasteurization in typical milk plants is introduced into a great tile drum inside of which are contained a number of rotating cylinders. Inside these cylinders the milk is heated, while the cylinders themselves move slowly around inside the drum. The round trip takes exactly 30 minutes.

To insure proper pasteurization many health departments require that the pasteurizing equipment be fitted with devices which record the amount of milk that passes through them, the temperature to which the milk was submitted, and the length of time the milk remained in the pasteurization process. These records, kept by automatic pens on rolls of paper, are inspected by public health authorities.

Hot milk must be cooled. In a modern plant, this is done by a most ingenious trick, called the regenerative cooler-heater system. Cold milk passing into the pasteurizing tanks is tricked into cooling the hot milk coming out of the tanks. By means of double tubes, one inside the other, the cold milk on its way to being pasteurized is heated by the hot milk coming out.

At the bottom of the milk cascade are the filling and bottling machines. The filling machine is a cylindrical device with a crown of stainless-steel tubes. Milk bottles move single file in a circle around the base of this machine on a moving belt. Automatically each tube settles down over a milk bottle, and then by a vacuum process floods milk into the bottle until it is filled. From there the milk bottles single-file along their moving belt to a similar capping machine, which fastens caps over the bottles. The belt moves on, carrying the milk to refrigerators where it is crated preparatory to final delivery to consumers.

Sanitary milk would be a grim joke, however, in dirty bottles. Strategic point in any milk plant, then, is the bottle-cleaning machine. Like all other processes this is automatic. The continuous automatic bottle washer looks like a giant tile-and-glass war tank without the caterpillar tread. At one end of it, bottles are fed into a slotted frame. Then the frame turns over, the bottles are immersed in a caustic solution, carried through it and reamed out with rotating spindle brushes, and doused in a chlorine solution. Finally washed and sterile, they are ejected onto a moving belt which carries them under the filling machines, in a long, single file. Inspectors along the way examine the milk bottles for defects, and the automatic filling machine sensitively examines the bottle rims for chips or cracks. If it discovers a chip or crack, with an uncanny canniness it refuses to fill the defective bottle; thus notifies the attendant, who removes it.

Final safeguard in an ideal milk plant is the nightly housecleaning. Each night after the milk is all bottled for the next day, the equipment is dismantled by experts, washed, sterilized, and reassembled. Perhaps a milk plant is the only modern industrial establishment which is completely dismantled and sterilized every working day.

Doorstep delivery rolls up the cost of milk. Consumers who ask for this and other special delivery services must pay the price.

Consumers who buy their milk at stores and deliver it themselves, in some cities are still taxed for a service they do not get.

Neapolitan milk men drive their cows through the city streets, deliver milk to their waiting customers directly from the cow's udder into a pitcher. For highly prized customers who use goat milk in Naples the milk man leads his goat by a rope straight to the consumer's kitchen. In Holland and Belgium milk is delivered from dog carts. The Mongolian on the inner plateaus of Asia rides his milk supply, dismounts from his mare, and milks her into whatever container Mongolians have. The streets of Turkey are crowded with goats whose masters deliver milk directly from the goat to the consumer for a copper coin.

Cows, goats, mares, none of these milk animals clutter up the streets of American cities waiting for consumers, but if cows, goats, and mares don't, certainly milk men with their familiar rubber-tired wagons or trucks do. A study of the milk-distributing companies in Milwaukee made by Milwaukee's Common Council in cooperation with the CWA, the FERA, and the Department of Agriculture, revealed that on one day, March 16, 1934, the milk trucks of 17 companies paraded up and down one city block to serve the customers in that block. In two blocks 15 milk wagons marched and countermarched to deliver milk. One thousand and twenty city blocks in Milwaukee were studied on March 16, 1934. In every block except one, at least two companies made deliveries. In 800 of the 1,020 blocks, five companies went in and out during the day to deliver milk. Six companies delivered milk in 146 different blocks, and in 147 other blocks seven companies competed with each other. In two houses nine companies made deliveries.

Competition in milk distribution results in a musical comedy parade of milk men up and down the streets of American cities. But besides, it contributes to higher prices of milk. No. 1 charge on the portion of the milk dollar the distributor receives is the cost of delivery. Studies of the Federal Trade Commission in Baltimore, Boston, Cincinnati, and St. Louis reveal that in 4 years, 1930, 1933, 1934, and 1935, the cost of delivery alone took from 21 to 28 cents of the consumer's milk dollar. Processing the milk in 11 distribution plants took only 10 cents of the consumer's milk dollar in these years.

Statistics about the milk business are as much disputed as politics. No one has ever emerged from a study of the milk business with unchallenged figures. The reason for this is not simply that some people are bullheaded and can't be made to believe anything. Part of the reason may be that one company uses one method of figuring costs, another company another method, with the result that statistics from different companies are hardly ever comparable. Government investigators studying milk companies may use still another method, decide that some costs recognized by the company are not true costs at all.

At the basis of the confusion is the fact that the distributing company's primary concern is the sale of fluid milk and cream, but along with milk they sell butter, cheese, eggs, chocolate milk, and malted-milk preparations. Some milk companies even sell bread and others a processed form of orange juice. Several investigated by the Federal Trade Commission sold honey. A yet unsolved problem of milk is how to charge to these various commodities the cost of selling them.

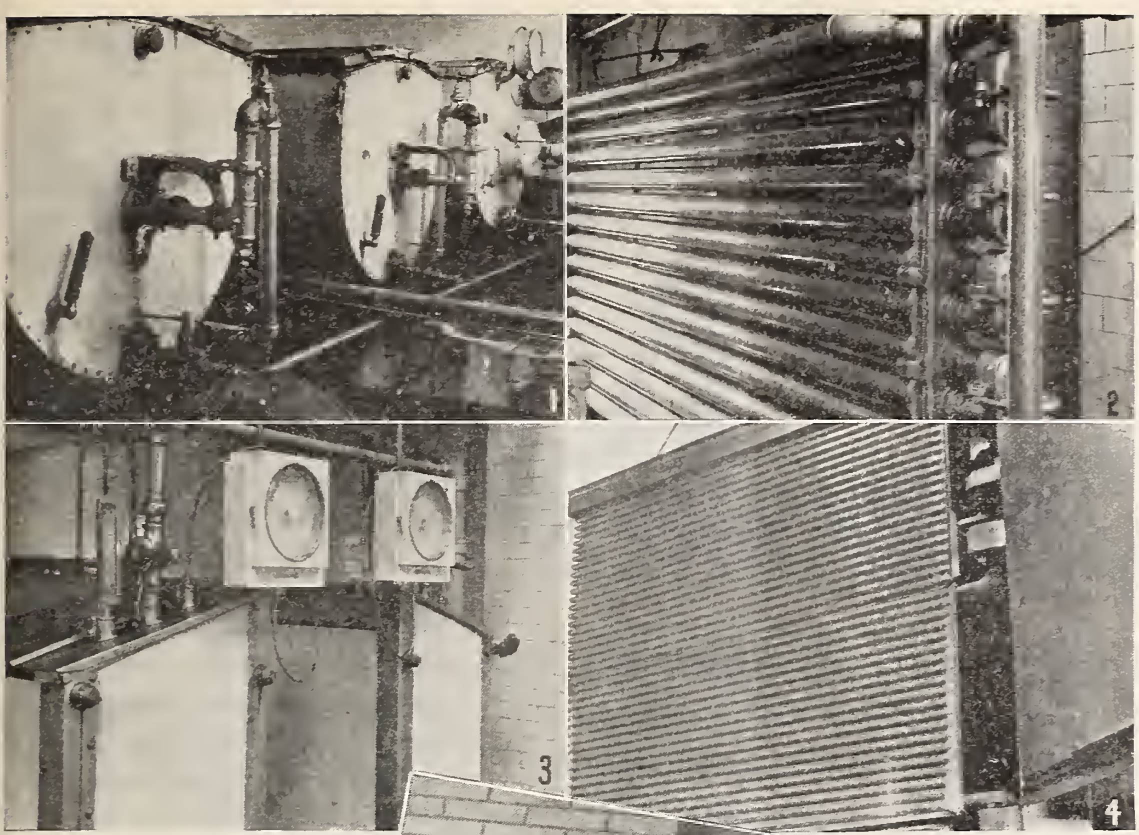
The Federal Trade Commission in a report on the distribution and sale of milk and milk products in Boston, Baltimore, Cincinnati, and St. Louis has said: "Data were collected from seven milk distributors. Each of these seven milk distributors divided his total delivery and selling expense each month among the various varieties of commodity handled. Among the seven distributors four different methods of making this distribution were used. Not all four methods of making this division could possibly be right, so that at least three of the methods were incorrect—and it is believed that all four methods were incorrect in some phase or other."

Delivery costs for the seven distributors in the four cities studied by the Federal Trade Commission indicate clearly, however, where a good part of the consumer's milk dollar goes. It goes into the costs of the daily milk carnival, the parade of the rubber-tired milk wagons. Costs ranged, in October 1935, from a low of 2.74 cents a quart for all grades of milk to a high of 5.23 cents a quart. Cream delivery costs per quart ranged from a low of 6.70 cents to a high of 11.52 cents.

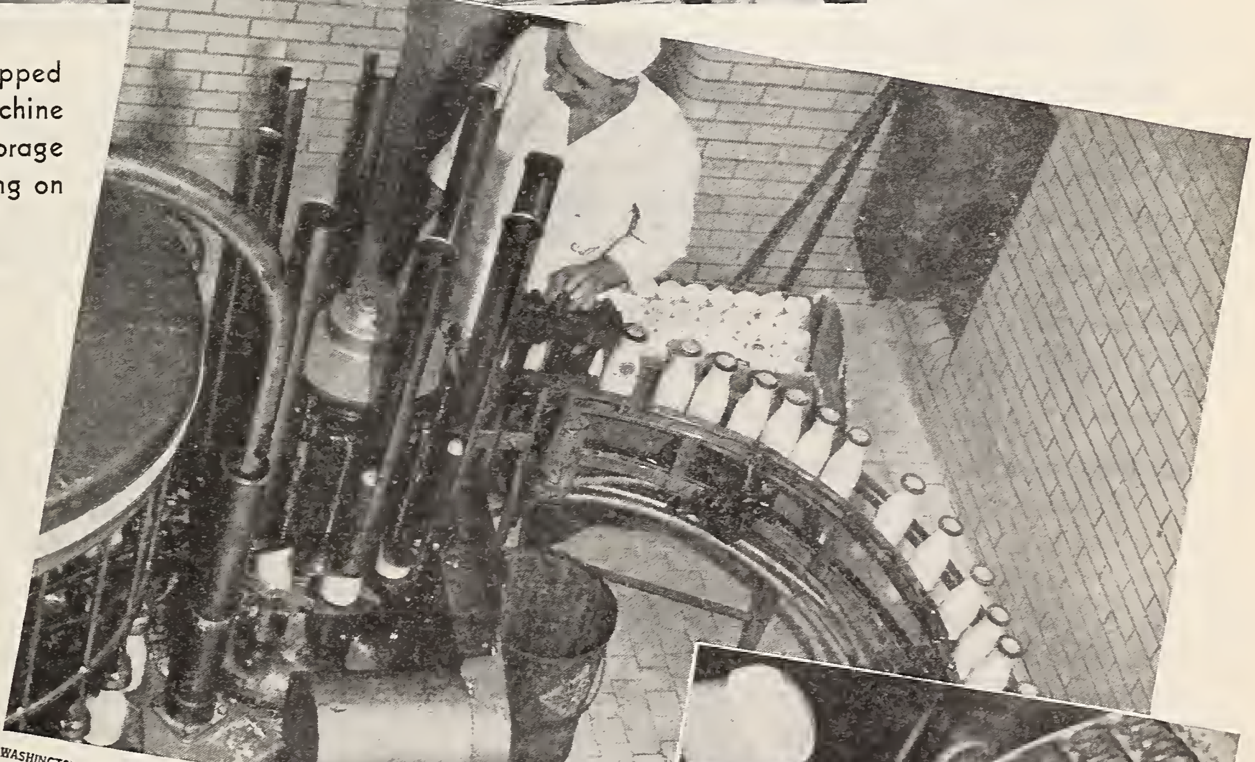
Consumers are not entirely free of responsibility for the size of milk delivery costs, however. They demand doorstep delivery. If for some reason a consumer does not get milk one morning and calls the milk company to dispatch to her immediately a pint or a quart of milk by special delivery, she runs up the cost. Such services are expensive, and for calling this tune consumers must pay a stiff price to the piper. But when consumers do not demand fancy delivery services they should not be required to pay for them. In many cities consumers who buy their milk at stores, and deliver it themselves, are still taxed for the cost of a delivery service they do not get.

Delivery through retail stores may save 1 cent a quart, possibly more, in handling expenses compared with delivery to the home. Substantially greater savings for consumers might be made by another method of delivery which has been tried out in New York City. To meet the demands of that city's depressed population for milk at lower cost, officials

[Continued on page 20]



FOR SAFETY'S SAKE, most consumers demand pasteurized milk which harbors the good but shuns the bad bacteria. Milk delivered to the pasteurization plant is run (1) into storage tanks, then through the preheater (2), and then a filter. Next into the pasteurizer (3) and into the cooler (4), milk is speeded on its way to the familiar bottle.


WASHINGTON POST PHOTO

Bottles filled and capped by this ingenious machine pass on to a cold-storage room to await loading on delivery wagons.

WASHINGTON POST PHOTO

Strategic point in any milk plant is the bottle-cleaning machine. Bottles are fed into this automatic bottle washer, immersed in a caustic solution, doused in a chlorine solution, to emerge washed and sterile on a moving belt that carries them under the filling machines.

Consumers' BOOKSHELF

We start a new policy with this issue of the BOOKSHELF. Previous editions have summarized past publications in the consumer-information field. These bibliographies have been collated, rechecked, and enlarged for publication in a single pamphlet later this year. Release date will be announced in the CONSUMERS' GUIDE.

To help our readers keep up to date on sources of information on consumer problems, the BOOKSHELF from now on will list new publications, books, pamphlets, magazine articles, graphic materials. Agencies releasing such publications are invited to send copies or notices for listing here. Mention of any material does not imply endorsement of the point of view of the author or agency by the CONSUMERS' GUIDE.

Do We Buy by Content or Container? by Rosamond C. Cook. Practical Home Economics, Vol. 15, No. 7. July 1937, pp. 243–244, illustrated. Back copies of this magazine may be secured from Practical Home Economics, 468 Fourth Avenue, New York, N. Y. 30 cents. This article is one of a series on "Problems for Consumer Buying Classes." Among the topics treated are: The purposes of containers, package size in relation to unit cost, deceptive packaging, and dual-use containers. Some projects for the student and a brief bibliography are included.

Dentifrices and Toothbrushes, by Edward M. Andres, under the editorial supervision of George R. Warner, M. D., D. D. S. Consumer Guidance Unit No. 1. 1937, pp. 31, illustrated. Address: Phoenix Junior College, Phoenix, Ariz. 25 cents. Information on the history, selection, and use of dentifrices and mouthwashes; the function, design, and care of toothbrushes. Projects for students and a bibliography are included.

Guides for Buying Sheets, Blankets, and Bath Towels, by Bess M. Viemont, Margaret B. Hays, and Ruth O'Brien, U. S. Bureau of Home Economics. Farmers' Bulletin No. 1765. December 1936, pp. 28, illustrated. Address: Superintendent of Documents, Washington, D. C. 5 cents. This bulletin combines two leaflets issued by the Bureau of Home Economics on Quality Buying Guides for Sheets and for Household Blankets previously listed in the Bookshelf. The section on towels is new material. Fiber content, construction features, proper sizes for different uses, and informative labeling are some of topics discussed for each product.

Fabric Insects—How to Combat Them in the Home, by W. P. Flint and W. E. McCauley. Circular No. 473. May 1937, pp. 12, illustrated. Address: Information Office, College of Agriculture, Urbana, Ill. Free. Describes the physical characteristics and the living habits of such fabric destroyers as carpet beetles, clothes moths, and cigarette beetles. Several effective ways of exterminating these insects are presented.

Consumers' Test Manual. April 1937, pp. 38, diagrams, lithoprinted. Address: Consumers' Research, Washington, N. J. 50 cents. This test manual includes material on chemical tests for food, food adulterants, substances in water, cleaning materials, and other household materials. General sections on laboratory procedure, apparatus, and reagents are included. This pamphlet is intended primarily for use in courses which include the testing of consumer goods as a part of their work. A knowledge of laboratory technique is necessary for making most of the tests.

ILLUSTRATIONS OF TESTS FOR EVALUATING INSTRUCTION IN SOME PHASES OF CONSUMER BUYING, adapted from a study by Mabel Combs Joyce. Miscellaneous Publication 1910. February 1937. pp. 37, mimeographed, diagrams. Address: U. S. Office of Education, Department of the Interior, Washington, D. C. Limited supply, distributed only to teachers of consumer buying classes. Free. Schoolroom tests are often used only as a basis for giving grades. This booklet, using consumer buying problems as an example, illustrates a more informal testing procedure to enable the teacher to evaluate and appraise the progress of pupils and point the way to future work. The selection of a child's toy, a paring knife, a piece of furniture, a cotton dress, a child's play suit, and an item of canned food indicates the application of the method to various commodity fields.

TAKE CARE OF YOURSELF, by Jerome Ephraim. 1937, pp. 287, illustrated. Address: Simon and Schuster, New York, N. Y. $2. Contains material on the selection and use of cosmetics and drugs; suggests methods of treating such common ailments as colds, indigestion, constipation, and overweight. Gives information on the care of the teeth, hair, and scalp. In the final chapter, Plain Talk to the Consumer, an analysis is presented of the present status of consumer literacy. The author stresses the importance of the education of consumers in the selection and use of the products they need for everyday living as a fundamental part of any program of consumer improvement.

COOPERATIVE ENTERPRISE, by Jacob Baker. 1937, pp. 266. Address: Vanguard Press, New York, N. Y. $2. The author of this book was chairman of President Roosevelt's Inquiry on Cooperative Enterprise in Europe. Chapters define the kinds of cooperative enterprise; describe cooperative principles, methods of operation, and causes of failures; and discuss the present status and future prospects of cooperative enterprise in the United States and Europe. Seventeen pages of the last chapter are devoted to a carefully annotated bibliography of books, pamphlets, and magazine articles on cooperatives.

SCHEMES THAT SKIN, by Howard Raver. 1937, pp. 26. Address: Cincinnati Better Business Bureau, 715 Chamber of Commerce Building, Cincinnati, Ohio. Free. This pamphlet is made up of reprints of 26 very brief articles from the *Cincinnati Post,* each describing a fraudulent scheme which has had the attention of the Better Business Bureaus in various sections of the country.

CONSUMER CREDIT—THE COST TO BUSINESS AND THE CHARGE TO THE CONSUMER, by Wilford L. White. 1937, pp. 15, multigraphed. Address: Marketing Research Division, Bureau of Foreign and Domestic Commerce, Department of Commerce, Washington, D. C. Free. This paper reproduces the talk given by Dr. White, chief of the Marketing Research Division, before the Conference on Consumer Credit held recently at the University of Chicago. In addition to a discussion of the costs of consumer credit, statistics are included on the growth of consumer credit since 1929.

FACTORS INVOLVED IN SATISFACTORY SHAVING, by Lester Hollander and E. J. Casselman. Journal of the American Medical Association, Vol. 109, No. 2. July 1, 1937, pp. 95–101, illustrated. Copies of the magazine containing this article may be available in some libraries. Single copies of this issue may be secured from the American Medical Association, 535 North Dearborn Street, Chicago, Ill. 25 cents. This report on the factors giving the most satisfactory shaving results is based on a 4-year study of shaving made at the Mellon Institute of Industrial Research.

CONSTRUCTION OF PRIVATE DRIVEWAYS, by David M. Beach, U. S. Bureau of Public Roads, Department of Agriculture, Miscellaneous Publication 272. July 1935, pp. 30, illustrated. Address: Superintendent of Documents, Washington, D. C. 10 cents. Gives suggestions on laying out drives, turning areas, and street entrances; plans for the construction of drives from gravel and stone, bituminous materials, concrete, and brick. Suggestions for handling steep grades and building retaining walls are included.

Industrial Standardization and Commercial Standards Monthly, July 1937, contains three short articles of interest to consumers: (1) "Consumer-Retailer Relations Council to Promote Consumer Program"; (2) "National Retail Dry Goods Association Officially Affirms Consumers Standards" gives the five-point platform adopted by this trade association calling for merchandise standards; (3) In "The Consumer Movement—A Boon to Merchandisers", in which a staff member of an advertising agency announces "Eight million women, and more, are ready to be used in every manufacturer's and retailer's sales promotion plan."

TIPS FOR PEACH FANCIERS

A bumper crop is piling baskets full and pushing prices down on this vitamin-starred fruit

SCENT of peach pie running over in ovens and pungence of peach preserves bubbling in pots float over the land as housewives get busy with the 1937 peach crop. Thousands of bushels of peaches will go to the commercial canneries this year; more thousands will reach the drying trays. The yield bending low the boughs of the Nation's peach trees is the heaviest since 1931.

Peaches, it seems, after a bad case of doldrums are staging a comeback. The 1937 crop will probably touch 57,700,000 bushels—a gain of 15 percent over 1936 figures. Almost all the important peach States point with pride to 1937 prospects—New York, New Jersey, Pennsylvania, North Carolina, Virginia, Michigan, Illinois, Tennessee, and Arkansas. Although California's gains have been slight, she still stands head and shoulders above her nearest competitor with a 22,000,000-bushel crop of clingstones and freestones. Her neighbors, Utah and Washington, are among the few States that admit heavy losses. Hardest hit in crop prospects is Georgia, long the acknowledged peach queen of the East. Her production slashed in half, she has temporarily yielded her crown to Pennsylvania.

That this year's crop does not exceed the peak production of 1931 is not surprising, for peach trees in the United States declined from 79,000,000 in 1930 to 67,000,000 bearing trees 5 years later. Not only market conditions but weather militated against peach production in those years. Above the Mason-Dixon line frost brought bud-killing and tree injury in its train. However, growers soon set about the business of planting new trees, spurred on by the relatively high prices that peaches were bringing at market. Besides, peach growers have come to take misfortune in their stride, for theirs is often a speculative business. The peach is perishable and the tree is beset by diseases and pests such as the "yellows" and San Jose scale. It is not long-lived nor is it hardy. Overproduction with resultant low prices for producers is another hazard that has turned growers' hair gray. California is making an effort to rout the low price enemy by enforcing a marketing agreement which limits shipment of the commonest-grown freestone peach—the Elberta—to U. S. No. 1 grade of a certain size.

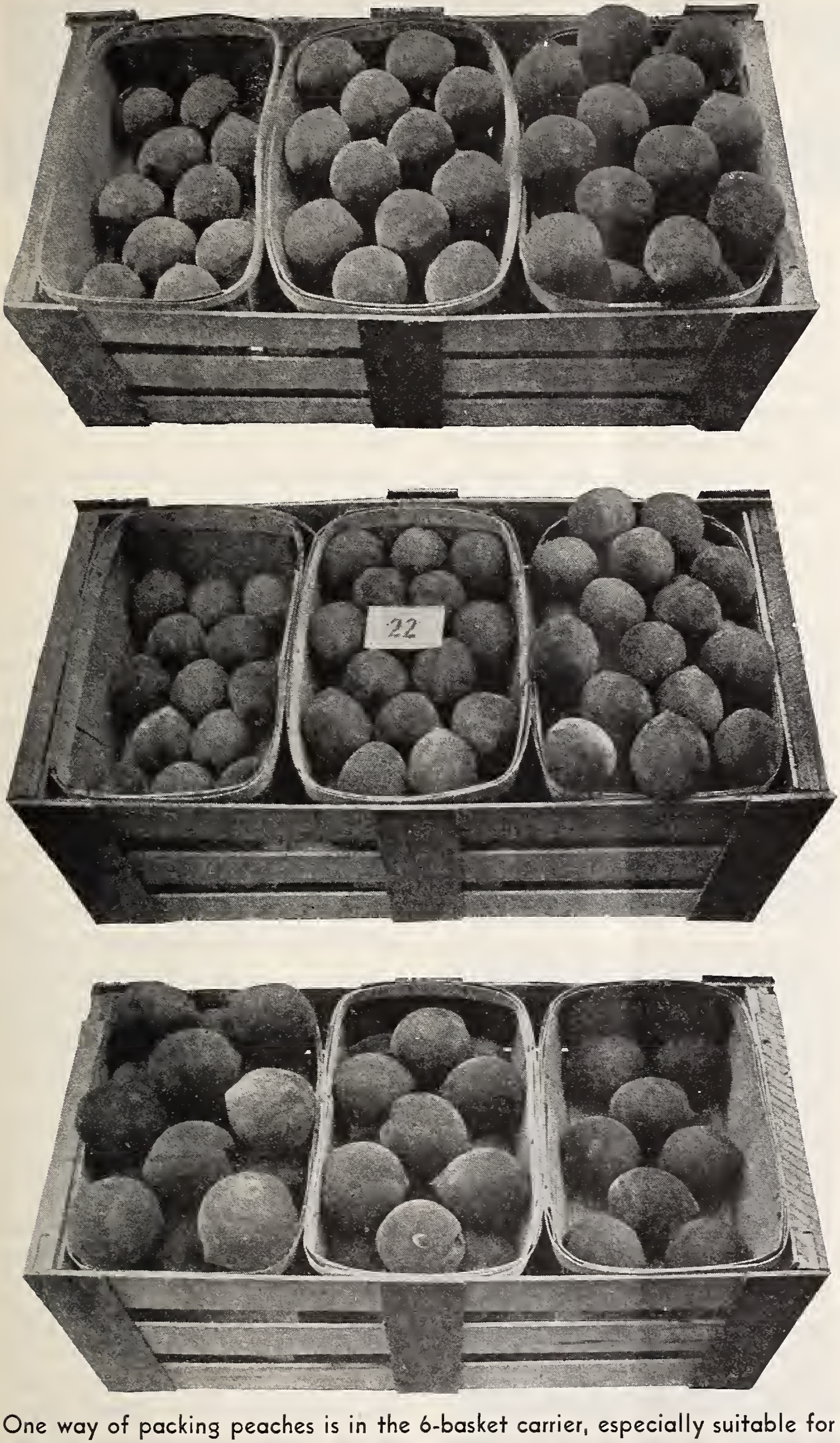
The peach owes its origin to China, its name to Persia—one of the stopovers in its globetrotting career. In fact, the peach lingered there so long it became known to the ancient world as the Persian apple. The Chinese invested the peach with the glamour of superstition. To us a peach is a peach—good in its own luscious right, but bearing no omen of good or ill fortune.

Definite fruit characteristics differentiate the races and varieties of peaches. Peaches may be smooth-skinned or covered with a heavy down. They may have white flesh or yellow, flesh closely clinging to the stone or falling free from the pit. In shape they can be round, or with a pronounced beak at one end. Again they can be as irregularly formed as the odd saucer-shaped members of the Peento peach family.

Both yellow and white peaches come as clingstones or freestones. Clingstones play their important part in commercial canning though some are sliced and home-pickled. Preference in peaches for fresh dessert use, drying, and home cooking points to the freestones. On the basis of geography, too, peaches can be divided. Most western peaches find their way to the cannery or the drying rack; eastern varieties are served as dessert fruit.

Just as there are style trends in clothes, there are fashions in fruit varieties. Right now the yellow-flesh peaches are most popular. Young hopefuls of the peach field are the varieties that have resulted from breeding work that has gone on for some 25 years. New features are improved flavor, juice content, texture, and the ability to attain a full, natural ripeness on the tree and yet withstand the strain of shipping long distances. Of these college-bred varieties, Halehaven and Golden Jubilee are making their mark at roadside stands and local markets in certain sections. The alliterative trio, Vedette, Valiant, and Veteran, originating at Vineland, Ontario, hold promise of success also.

No young upstart has been able to steal the show from Elberta, a standard variety of freestone. The fruit matures in season to a size 2¾ inches long by 2½ inches wide. Its skin changes on maturity from greenish yellow to orange yellow, often mottled with red. Skin is thick, tough, and downy. Flesh is yellow, stained with red near the pit and is juicy though stringy, firm, and sweet. In



One way of packing peaches is in the 6-basket carrier, especially suitable for early, tender peach varieties such as Carman, Hiley, and Belle. Above are the 2–2, 3–2, and 2–1 pack. These terms indicate the size of peach—medium, small, and large—that went into the 4-quart baskets.

quality Elberta falls short of Crawford and Champion peaches and it is too tart to suit some tastes, yet because it handles well commercially, holds its own as the most widely grown variety in the United States.

Should choice turn to a white-fleshed peach, Champion is without a peer when well-grown, but the fruits though attractive run small and are apt to be off color. This soft-fleshed variety has been an easy prey to brown rot and is no longer grown commercially.

Only three-way fruit—that is, good for canning, drying, and shipping—is Muir, boon to experienced peach men during the depression. This variety seems equally at home on Eastern ground. Though unprepossessing in appearance, given a chance to prove its worth for culinary purposes, it more than lives up to expectations.

Not every consumer is able to buy tree-ripened peaches, but by a little care, one can and should buy ripe peaches. Because peaches are extremely perishable, they are often picked slightly immature so that they will stand shipping better. Sometimes they are picked so immature that they cannot ripen satisfactorily, will shrivel, and generally lack the tender, tasty flesh of ripe fruit. Ripeness is indicated by firmness and by the extent to which the green on the under side of the peach has turned to a whitish-yellow color.

For home purposes, whether for canning or eating fresh, choose peaches of the yellow-fleshed mid-season and late varieties such as Elberta, Salway, J. H. Hale, and Smock. Among other good canning varieties are Golden Jubilee and Vedette.

Peaches of fine quality should be firm, free from blemishes, and of fresh appearance. Ground color should be whitish or yellowish sometimes combined with red blush. A red cheek alone is not a true sign of maturity, however, since color mottlings vary with variety.

Overmature peaches, recognized by softness to the touch, bruise easily, are fit only for immediate

[Concluded on page 23]

Your Food Supplies & Costs

For the second month in succession a sharp reduction in fresh vegetable prices offset price increases in all other major food groups, and retail food costs in general dropped 0.4 percent from June 15 to July 13. Large potato supplies continued to be the major factor in the downward swing of vegetable prices, but prices of almost all truck crops were lower. A marked increase in meat prices, however, nullified most of the effect of lower vegetable prices.

Recent declines in general food costs have helped to narrow the spread between current costs and those of a year ago. On May 18 food costs as reported by the Bureau of Labor Statistics were 8 percent above a year ago. Two months later, on July 13, they were only about 2 percent higher than in the same month in 1936. Higher prices for meats and cereals and bakery products are mainly responsible for costs now being above their 1936 level.

Price changes in different sections did not follow the change for the country as a whole during the 4-week period ending with July 13. Along the Atlantic seaboard food costs moved up around 0.5 percent. In the East Central and Western States the cost of the consumer's market basket dropped about 1.5 percent. Largest decline occurred in the West North Central States and amounted to 2 percent. A sharp rise in egg prices in the New England States was the major factor in causing this area to have the largest increase of 0.7 percent.

Among the various types of food in workers' market baskets generally meats and eggs showed the biggest price rises between June and July. At this time of year eggs usually get more expensive. During the month they jumped 9 percent in price. Marked price increases in pork and beef and small advances in poultry and lamb pushed up meat costs 5.4 percent. This carried meat to its highest price level for any month since October 1930. Meat prices have been going up since mid-February but this was the largest rise this year. Dairy products advanced seasonally 1.6 percent. Changes in the price of other food groups were negligible except for fresh fruits and vegetables.

Fresh fruits and vegetables cost 15 percent less in mid-July than at the middle of June, with most items except citrus fruits lower in price. Compared with a year ago, fresh fruits and vegetables were 18 percent lower. Other groups were higher by the following amounts: Meats, 13 percent; fats and oils, 9 percent; cereals and bakery products, 6 percent; dairy products, 2 percent; eggs, 0.3 percent.

Relatively large fruit and vegetable supplies are in prospect during the remainder of the year. As marketings of late crop vegetables and fruits increase seasonally, prices probably will go down and drop below their level last year. Production of all truck crops in the late producing States is expected to be about one-sixth larger than last season, and about 20 percent above average. The late potato crop, which is now starting to move to market, gives signs of being 18 percent larger than a year ago. The crop of peaches for August and September shipment is expected to be twice as large as a year ago. Apple production will probably be as much as 70 percent greater than last year's small crop. The 1937 pear crop is of record size.

Potato prices to consumers continued to drop sharply and on July 13 were selling at about half their level a year ago.

Slightly lower pork prices are in prospect for consumers this fall. The hog-marketing year commences on October 1, at which time spring pigs begin to move to market, and prices customarily go down. The seasonal increase in slaughter from October through December probably will be less than usual because of the small 1937 spring pig crop and the tendency for farmers to hold their hogs for marketing at heavier weights in 1938. However, prices most likely will register their usual decline because the demand for products for storage is expected to be less than a year ago.

Retail pork prices advanced sharply from June 15 to July 13 and reached their highest level for this month since 1930 as July slaughter supplies dropped to their lowest level since 1896. Prices of fresh cuts registered the major increase, going up 4 cents a pound, while smoked items were from 1 to 1.5 cents a pound higher. Lard prices dropped slightly. Compared with a year ago fresh pork is 8 cents a pound higher, ham and lard are up 1.5 cents a pound. Bacon is only slightly higher.

No immediate change in cattle prices is expected. During the winter and spring, however, price declines may occur as a result of increased supplies of grain-fed cattle. Prices of better-grade cattle probably will continue at or near their present relatively high levels, at least through the early fall. The usual fall decline in lower-grade cattle prices is likely to be small because of a good demand for cattle for feeding.

Beef prices to consumers made their sharpest increase of the year when prices of steaks and roasts, respectively, advanced 3.5 and 2 cents per pound from June 15 to July 13. On July 13, beef prices were at their highest level for any month since the middle of 1930. Compared with a year ago steaks and roasts are up 10 and 6 cents per pound, respectively.

Lamb prices ordinarily reach their seasonal low point in October or November, but this year no further material price decline may occur. Live lamb prices are expected to remain at or near their present level during the remainder of the grass-fat lamb season which ends in November. Lamb slaughter probably will increase less than usual from September through November because of a heavy demand for lambs for feeding purposes.

Increases in retail lamb prices were the lowest in the meat group during the 4-week period. Rib chops went up 2 cents a pound, and most other items advanced 1 cent per pound. Whereas pork and beef prices were much higher than a year ago, most lamb cuts were only around 1 cent a pound higher.

Usual advance in butter prices is expected during the remainder of 1937. Ordinarily butter prices reach their low in June and then move up to a peak in November or December. Prices generally do not go up sharply until after August. Because of relatively good pastures and increased feed supplies, milk production has continued at relatively high levels. Butter production probably will continue larger than in 1936 for several months, but during the latter part of the year may only be about the same. Retail butter prices remained unchanged at 38.3 cents per pound from June 15 to July 13, but were 2 cents a pound lower than a year ago.

Larger egg supplies than a year ago are in prospect for the remainder of 1937. Prices probably will go up less than they usually do in these fall months. During the last half of the year egg supplies come primarily from cold storage. Egg prices to consumers advanced seasonally 2.5 cents per dozen from June 15 to July 13. On the latter date prices were at about the same level as a year ago.

Average retail white bread prices for the United States remained unchanged during the 4-week period. This marked the first period since February in which no increase has occurred. On July 13 the price of white bread was 0.6 cent a pound higher than a year ago. The estimated average wholesale cost of the ingredients used in making a typical pound of bread, however, was only 0.2 cent a pound above a year ago. As a result the margin between retail prices and ingredient costs on a pound loaf of white bread has widened by almost a half cent.

A PERSPECTIVE OF FOOD COST CHANGES
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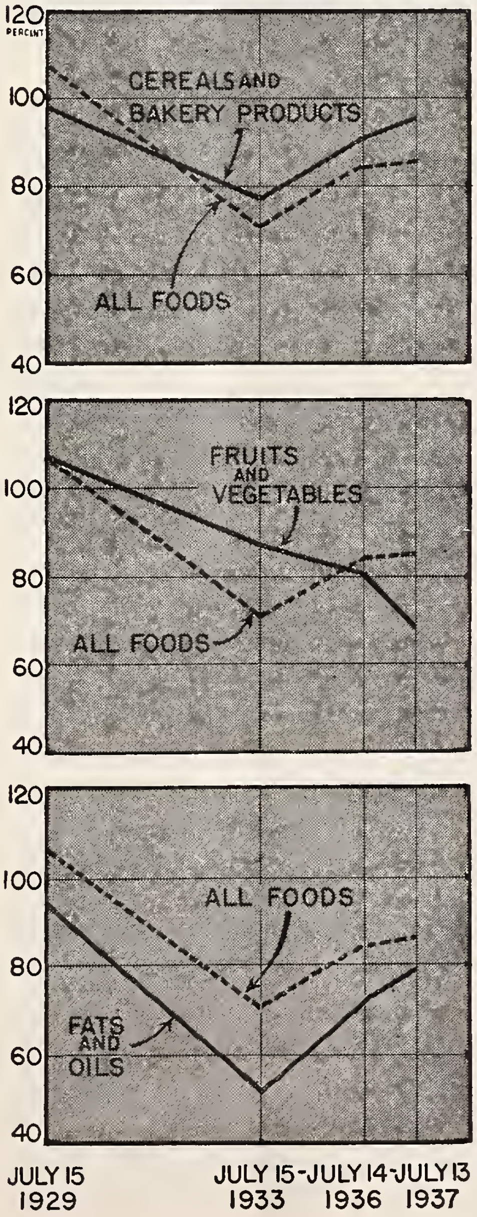

A CLOSE-UP OF FOOD COST CHANGES
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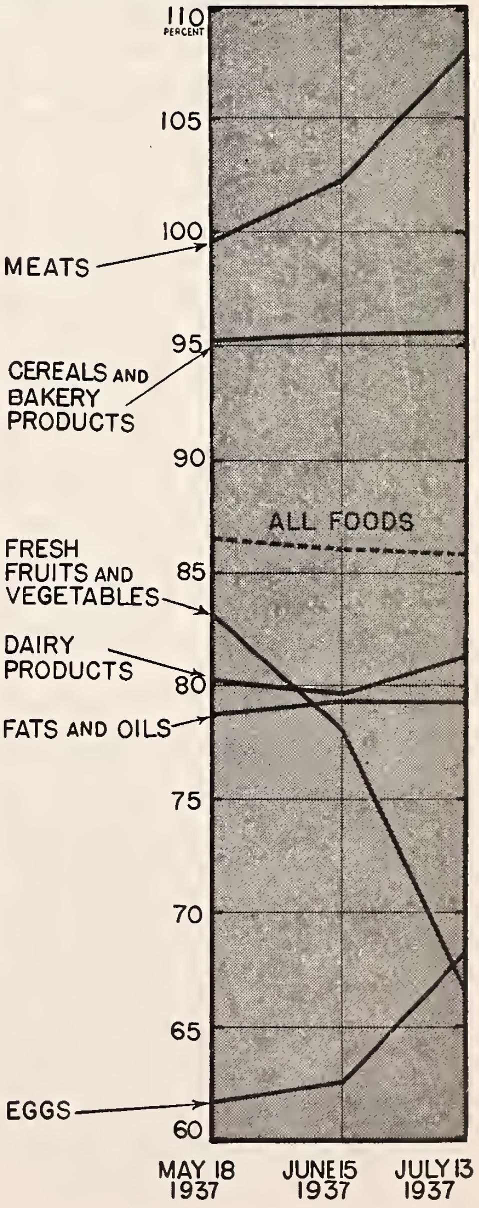

MILK PARADE

[Continued from page 12]

set up a system whereby delivery is made direct to consumers from a dealer's wholesale truck within a 2-hour period each morning. Sales are for cash, and bottles must be returned or a deposit forfeited. Actual expense incurred in this method of distribution has not been reported, but it is perhaps significant that dealers were eager for the chance to deliver and sell this milk at 8 cents a quart when the regular retail delivered price was 13 cents and the store price 12 cents. Significant also is the demonstration in New York City that a cost saving of 3 or 4 cents a quart to consumers will stimulate an abundant willingness of consumers to purchase milk by this inconvenient method. At one time 90,000 quarts per day were being sold in this way from 150 milk depots.

Cities whose health officers accept some responsibility for getting more milk consumed by needy families, as well as for keeping milk clean, could readily determine for their own localities what saving in handling expense is available to consumers by this method of distribution. New York City's experiment has been carried out with some assistance of public funds. But an analysis of its operation indicates no reason why it cannot proceed on a self-supporting basis.

But this is a story of a competitive milk system, the story of many competing milk companies. What, the Milwaukee Common Council asked, would be the cost of milk distributed noncompetitively by the city? How much would it cost to buy milk from farmers and sell it through one city-owned company? And how, it wanted to know, would the cost of such a system compare with present competitive costs. What are the wastes of competition and what are the savings of public distribution?

To answer these questions, four large public agencies, the Civil Works Administration, the Federal Emergency Relief Administration, the city of Milwaukee, and the United States Department of Agriculture, studied milk in Milwaukee for more than 2 years, peering into every nook and cranny of the Milwaukee milk system, computed, estimated, drew plans.

Plans for a publicly owned milk system (in which the Department of Agriculture had no hand, incidentally, for it only participated in the study of milk as it is distributed in Milwaukee today) indicate that a publicly owned system of milk distribution in Milwaukee could sell milk to the consumer for 2 cents per quart less than the present price and could pay farmers 21 cents more a hundredweight for their milk.

Consumer conscious, the investigators began their study of Milwaukee milk by studying Milwaukee milk consumers. All Milwaukee families, they discovered, used butter, nine-tenths of them used fluid milk, two-thirds of them used cheese, only one-fourth of the families studied used cream.

Average Milwaukee family used $1\frac{1}{3}$ quarts of milk a day, a quart of buttermilk once a month, a pint of light cream once every 16 days, a pint of heavy cream once every 2 months, a quart of ice cream once a month, a pound of cottage cheese every 20 days, a pound of hand-spread cheese every 15 days, and a pound of butter every 3 days.

Milk consumption varied according to the economic level of the families studied. Cream consumption was limited almost exclusively to families of middle and high incomes. In a low income district of Milwaukee, the per capita daily consumption of milk was only one-half pint, the average for the city was slightly over seven-tenths of a pint. In one section of Milwaukee the average person used a pint of cream only once in 3 years, in a high income section of Milwaukee the average person used a pint of cream about once every 25 days. Milk consumption, too, varied in families according to the number of children and the nationality of the family. Negroes, for instance, used comparatively little milk, though this may perhaps be due to the fact that the average income of the negro families studied was considerably lower than the income of the white families studied.

Milwaukee consumers buy their milk chiefly from distributors' wagons; four-fifths of the 8,800 families studied got all their milk from distributors' wagons. Families using least milk bought their milk in stores. Families using most milk bought milk both from distributors' wagons and from stores. On the other hand practically all butter was sold through retail stores. Retail stores handled approximately one-sixth of the fluid milk sold and one-fifth of the fluid cream. Most stores studied, incidentally, reported a sharp decrease in the amount of fluid milk sold in 1934 as compared with 1931 and a sharp increase in the sale of canned milk. Public institutions accounted for one-eighth of Milwaukee's fluid milk, two-fifths of its canned milk.

Price, a primary concern of consumers, also received the attention of the Milwaukee investigators. Previous studies in New York indicate that a 1-cent increase or decrease in the price of a quart of milk makes very little difference in the consumption of milk, but a 2-cent increase or decrease in the price of milk has an immediate effect on consumption. Thirty percent of Milwaukee consumers stated that they would use more milk if the price of milk were reduced 2 cents a quart. Among the families with low income, milk consumption, they said, would increase 14.5 percent if the price of milk were dropped 2 cents a quart. Families with intermediate incomes would increase milk consumption 11.1 percent and families with the highest incomes would increase consumption 6.2 percent. Butter consumption would increase 15.8 percent if the price of butter were reduced 4 cents a pound.

Milwaukee milk dollars in 1933 paid 53 cents to the farmers, 46 cents to the distributors. In 1934 the farmer's share of the milk dollar was 46.8 cents. Beginning in 1923, when the farmer received 58.1 cents of the milk dollar, down to 1934, when he received 46.8 cents of the consumer's milk dollar, the farmer's share consistently decreased. During this same period the retail price of milk declined from 10.5 cents to 9.4 cents and the distributor's gross margin increased from 4.4 cents to 5 cents.

Distributors' shares in the consumer's milk dollar are not all profit, however. In 1933 for instance, the distributor paid 14.8 cents out of each dollar for processing the milk, of which 6 cents was wages. He paid 26.7 cents for delivering the milk, of which 19.5 cents was wages. It cost the distributor 2.42 cents to sell the milk, of which 1 cent was paid out in wages. Administrative expenses cost the distributor 3.28 cents. Altogether his expenses, as shown by his accounting method, totaled 47.2 cents. Since he received only 46 cents of the consumer's dollar, however, in that year he incurred a loss if his system of figuring was correct. In other words, the consumer received $1.01 in milk and milk services for each dollar he spent.

Consumers have often heard of the economies that can be gained from the operation of a large-scale plant, but large-scale operation does not necessarily mean economies; sometimes bad management can cancel the gains that result from large-scale operation. The Milwaukee investigators discovered that in April 1934 medium-sized milk plants were more efficient than large milk plants. Men working in medium-sized milk plants handled 984 quarts of milk per man day. In large plants this average was 830 quarts per man day, in small plants 484 quarts. Average output per man daily for the entire city of Milwaukee was 845 quarts of milk per day per man.

With delivered milk at 13 cents a quart, when New York City made possible purchases by relief families at 8 cents a quart during a daily 2-hour period at central depots, dealers were eager to sell and consumers, certified to by relief agencies, lined up to buy.

Boston auditors, at the request of the Massachusetts Milk Control Board, took apart the accounts of the Boston dairies to discover significant facts bearing on large versus small operations. They found 80 percent of Boston's milk supply in 1935 was furnished by 7 percent of Boston's milk dealers. The remaining 20 percent was supplied by 93 percent of the city's milk dealers. Thus a few big dealers were supplying most of the milk, and a great many small dealers supplying a small part of the city's milk.

Comparing costs of big and little dealers, the auditors found the big ones had the jump on their smaller competitors as far as processing costs were concerned. This part of their operations was four-tenths of a cent a quart less. But against this economy was a much higher cost for the retail delivery operation. Here the little dealers were shown to be doing a much less expensive job, with average delivery costs 1.1 cents a quart under such costs of the big distributors. Total city operations on this home-delivered milk in the case of the big dealers were two-thirds of a cent a quart greater than in the case of the small dealers. Processing and delivery of cream to Boston homes was found to cost one-half cent less per half-pint bottle when done by the smaller dealers. Wholesale deliveries of both milk and cream were performed at less cost by large dealers than by small ones and they enjoyed the lion's share of this class of business.

Another measure of efficiency is the used capacity of a plant. By this standard, Milwaukee competitive milk distribution does not show up very well. Twenty-two plants in Milwaukee could have pasteurized 71 percent more milk than they actually pasteurized in April 1934. They could have filled 122 percent more bottles than were actually filled and washed 91 percent more bottles than they actually washed. This may be due to the fact that milk sales in individual companies vary much more than the milk sales of all companies. Money, time, and labor is expended by milk companies in an attempt to capture milk markets from each other. Because of the greater variation in sales, plant capacities must be higher than necessary to take care of sales variations. Milk plants therefore operate much below capacity during shifts in the milk market in milk sales from one company to another.

Milk plant investments in Milwaukee increased from 1928 to 1934, while milk sales volume declined. For every quart of milk sold in 1928 there was 5.4 cents invested in milk equipment. By 1934 each quart of milk sold had represented an investment in plant of 6.6 cents. Altogether 20 of the 25 plants operating in Milwaukee handling 97 percent of the Milwaukee milk supply had net fixed assets of $3,300,000. In plant equipment this represented a bottle-filling capacity of 90,000 quarts an hour, a bottle-washing capacity of 78,000 quarts an hour, and a pasteurizing capacity of 70,000 quarts an hour. The total worth of these 20 companies was 7 million dollars. In addition, they used about 2½ million dollars of borrowed capital.

Thus the cooperative investigators of Milwaukee milk distribution blocked in the picture of milk in Milwaukee: A wasteful delivery system, a relatively inefficient utilization of equipment, a consistent need for milk by the people of Milwaukee, and at the same time a milk economy that was not particularly profitable to the businessmen who distributed the milk.

Alongside this picture was placed a perspective for a public milk-distributing system. They pointed out, however, that a publicly owned plant is not the only alternative to the present wasteful competitive system. For instance, the investigators suggested that milk prices and milk efficiency in Milwaukee might be benefited by zoning sales territories among distributors to reduce duplication. It has been suggested that Milwaukee might regulate milk companies just as many public utilities are regulated. It might begin to correct the mistakes of competition by permitting milk distributors to process milk but by distributing the processed milk through a publicly owned distributing system. Another suggestion would grant a closely supervised monopoly of milk distribution in Milwaukee to one distributor just as streetcar companies are given franchises.

Exploring the possibilities of a publicly owned milk-distributing system, however, the investigators estimated that such a system would need one large city plant and five country stations so situated that no producer would be more than 2 hours from the station to which he was supposed to deliver milk. The country stations would assemble the milk for delivery, transship it to the central distributing plant in the city from which it would be distributed. The contemplated milk-distributing system in Milwaukee would have a pasteurizing capacity of 100,000 pounds of milk an hour, sufficient to take care of the needs of Milwaukee consumers until 1950. Three cream separators would give this public plant a cream-producing capacity of 11,000 pounds of cream an hour. There would also be equipment for the manufacture of Vitamin D milk, chocolate milk, buttermilk, and additional machinery capable of manufacturing 25,000 pounds of butter in 18 hours.

Ice cream machinery in the public plant would have a capacity of 1,400 gallons an hour. Other equipment would enable the public distribution system to transform surplus milk into cottage cheese and powdered skim milk. The 16 air-conditioned buildings contemplated by the public plant would cover 24½ acres. The plant would handle about 1½ million pounds of milk daily and would deliver milk to consumers 12 to 24 hours fresher than the milk they now receive. Altogether the plant would employ 1,300 persons, of whom about 50 percent would be engaged in the delivery of milk to the consumer.

Such a plant would cost 5 million dollars. An additional 5 million dollars would be necessary to reimburse present distributors for their plant equipment. The daily operating cost of the public plant would be about $11,500, of which about half, or $5,700, would be the daily wage bill.

Estimated savings under this arrangement would result in a 2-cents-a-quart savings to consumers and allow an additional 0.301 cent per quart for milk producers. At the same time, even with these savings, the public milk system would be able to pay for itself in 19 years. Savings would come from economies in the processing and delivery of milk. In the public milk plant, processing milk would cost 0.83 cent per quart. In the most efficient plants studied by the Milwaukee investigators this cost was 1.01 cents. In the least efficient plant studied this cost was 4 cents. Delivery under the unified system would cost 0.82 cent a quart. The most efficient competitive companies studied had a delivery cost of 0.88 cent a quart, and the most inefficient had a delivery cost of 2.49 cents per quart of milk. The unified public company would be 0.24 cent per quart more efficient than the most efficient private company now operating and 4.86 cents a quart more efficient than the least efficient plant now operating.

MAPPING THE ROUTE

[Concluded from page 7]

becomes less, workers themselves improve their consumption habits, making their diets a better balance of foods high in energy-giving qualities and foods starred for their vitamins and minerals.

Arriving at these conclusions, the researchers next turn their spotlight on agriculture. What can agriculture do, they ask, to meet the need for more and better kinds of foods for workers?

To get the answer to this question they turn to the International Institute of Agriculture. From them comes the report that: "Agriculture has not only kept in step with the demand for its products but in some respects has outstripped such demand. True, the information on the subject is far from complete. It is also clear from available data that many of the protective foodstuffs especially stressed by nutritive science are still produced in quantities deficient to meet even minimum needs. Nevertheless, the outstanding and important fact which emerges from a study of the data is that *technically* agriculture is in a position to meet the requirements for foodstuffs for an adequate diet. Revolutionary advances in the production, transport, storage, and distribution of foodstuffs have made *potentially* possible a much higher level of nutrition for all of us."

Putting potentialities into practice is the problem of economics and statesmanship.

TIPS FOR PEACH FANCIERS

[Concluded from page 17]

consumption. Even if the outer skin of a bruise is not discolored, the bruised flesh is too soft and discolored for use.

Watch for unevenness in shape and small surface punctures exuding a gummy substance. These are telltale clues of worm injury. Brown circular spots are warnings of decay ahead, too.

The United States has set up standard quality grades that are in general use among shippers. These define the requirements of the various grades, and specify the tolerances of defective peaches which may be allowed in each grade. The size of the peaches is stated separately from the grade. Thus peaches of any size—2 inches or 2½ inches—may be rated as U. S. Fancy, U. S. Extra No. 1, U. S. No. 1, U. S. No. 2.

Although such descriptions are of indirect benefit to consumers, their general use is more important to the trade in providing a common language for shipper and distant buyer.

Grades for canned clingstone peaches consist of U. S. Grade A (Fancy), U. S. Grade B (Choice), U. S. Grade C (Standard). The same grades apply to special packs for hospitals in which no sugar goes into the can. Other grades below U. S. standard requirements hardly concern the homemaker.

Cooks don't have to go to a lot of trouble to turn out a delicious dessert made of peaches. There is nothing much simpler to prepare and much more delectable to eat than a dish of peaches and cream. It's healthful, too, for yellow peaches are an excellent source of Vitamin A, fair source of B, good supply of C. And remember, if dessert has to stand awhile, lemon juice squeezed over the peaches will prevent them from turning a dusty brown.

STUDY QUESTIONS FOR THIS ISSUE

1. What new approach to the problems of workers has the International Labor Office been making?
2. When nutritionists say that diets are "deficient", what do they mean?
3. What did American experts find out about diets of workers in this country?
4. Does there seem to be a need for more foods by workers in this and other countries?
5. Does the International Labor Office think that agriculture is *able* to supply foodstuffs for an adequate diet?
6. What food values do grapes have?
7. Does this year's crop of grapes promise to be large?
8. What types of grapes are sold as raisins?
9. What are some of the things consumers should watch for in getting best value for their money when buying grapes?
10. Why is it wise to buy pasteurized milk?
11. How many milk companies deliver milk to the people living in your block?
12. How might consumers help to cut delivery costs if they were assured they would get the benefit of these economies?
13. How has New York City arranged to get milk at a lower cost to relief families?
14. Are relief families in your city helped in getting more milk in their diets? How?
15. In what ways did the Milwaukee investigators suggest milk prices might be reduced?
16. What are the prospects for the 1937 peach crop?
17. What is the food value of peaches?
18. When you buy fresh peaches what quality points should you watch for?
19. Do any stores in your neighborhood sell canned peaches which are graded according to Government standards?

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September and October fill market baskets with their greatest supply of grapes for consumers who like them fresh.

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From doorsteps of city milk plants to doorsteps of city consumers, we explore—in this second of our series on Milk for Millions—the tangled web of prices and costs of this champion food.

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A bumper crop is piling baskets full and pushing prices down on this vitamin-starred fruit.

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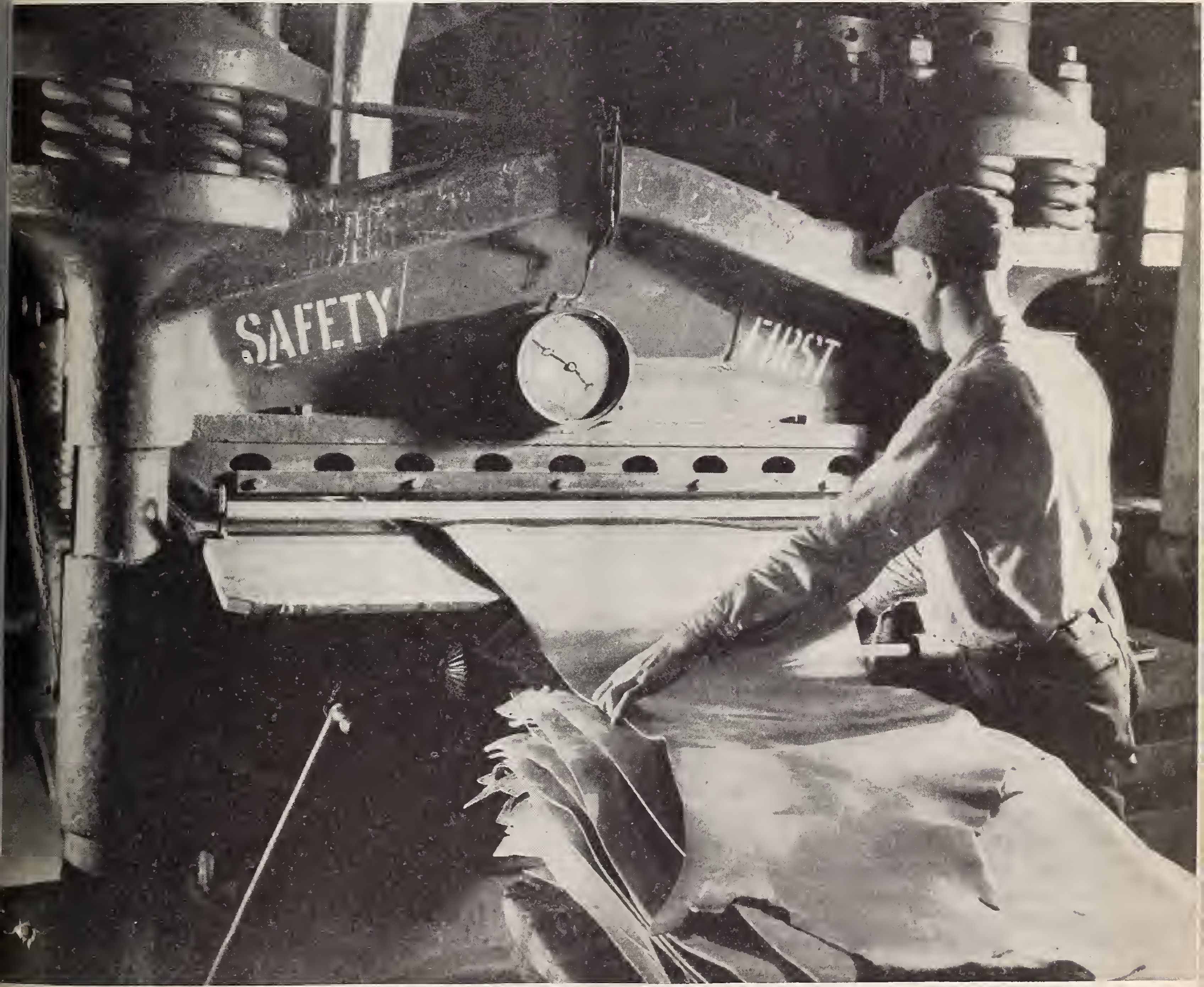
CONSUMERS' Guide

VOLUME IV, NUMBER 12 SEPTEMBER 6, 1937



FROM HIDES TO HANDS

CONSUMERS' Guide

Issued every two weeks by the Consumers' Counsel, Agricultural Adjustment Administration, Department of Agriculture, Washington, D. C.

Vol. IV, No. 12 Sept. 6, 1937

No blindfold buyer is the United States Government. A Government agency needing supplies asks the Federal Specifications Committee to write up the order. If no standard specification—detailed description of quality and kind of product desired—already exists, this Board usually calls on the Bureau of Standards to conduct tests and investigations on which to base specifications. These statements of quality requirements then go back to the Board. If satisfactory, bids are asked. Specifications are printed and added to the Federal Standard Stock Catalog for future use by Government agencies. No delivery is accepted without proof that specifications have been lived up to. In case of doubt, the Bureau of Standards again tests for compliance. (See Consumers' Guide, July 13, 1936.)

Toothpaste needs of the Veterans Administration recently provided an interesting illustration of the way the Bureau of Standards, official tester, stands guard over the quality of goods purchased by the Government. Before bids were asked on a purchase of 168,000 tubes of this product, the Federal Specifications Committee requested Standards to prepare a specification. Experts at the Bureau set to work: read the literature on dentifrices, consulted manufacturers and chemists, tested many dentifrices. Realists, the Bureau does not set standards which nobody can meet, so in this case tests were made of commercial brands.

Scratchy toothpastes are harmful to tooth enamel, as every careful consumer knows. The Bureau tested 25 brands for abrasion. The test is simple for Bureau experts, not so easy for household buyers: "Toothpaste shall be placed on glass and rubbed with a copper alloy similar in composition and shape to the 5-cent coin which has been previously rubbed against glass without scratching. The glass shall be of the usual soda-lime grade in noncorrosive microscope slides." If the paste scratches the glass it is rejected. Of 25 brands tested, 10 failed in this abrasion test.

Manufacturers who want consumers in general to know how their product rates against the Government standards can label their product with a statement guaranteeing that it conforms with the Government's specification for toothpastes. The National Bureau of Standards does not make routine or commercial tests of toothpaste, nor is it in a position to reveal the names of brands tested or the results arrived at in connection with drawing up Federal specifications. Copies of the toothpaste specification No. FFF–D–191 may be secured from the Superintendent of Documents, Washington, D. C. The charge is 5 cents in coin or post-office money order. Stamps are not accepted.

More tips in buying dentifrices will be available by mid-September when the Council of Dental Therapeutics of the American Dental Association issues its new "Dental Nostrums and the Public Health." First section of this booklet will discuss dangerous chemicals contained in preparations to bleach the teeth; the second treats of pyorrhea remedies; the third considers dentifrices in general. The latter includes the material previously released in a mimeographed bulletin, "Doctor, What Dentifrice Do You Recommend?", which was listed in the July 26 issue of the Consumers' Guide and is no longer available.

Cities, some of them, have their systems of testing for quality before buying, too. A recent report describes the work of the Bridgeport, Conn., city testing laboratory. Before 1935 the libraries, parks, public schools, and other city agencies did their own buying. Now purchasing activities are coordinated and over $3,000,000 worth of goods passes through the testing laboratory annually. Standardization of products has been introduced. Combining orders, too, has made it possible to save. Some of the equipment in the laboratory was designed and built by the city clerk who operates the present purchasing system. . . . Instructive field trips for consumer study classes would be visits to city, State, and Federal purchasing departments.

Consumers in Connecticut are going to get buying helps over the air now that that State's Consumers' Information Service has arranged to supply script to five radio stations. Sponsored jointly by the State Department of Agriculture, the Connecticut Consumers' Council, and the Works Progress Administration, this State sends 5-minute news releases three times a week to the radio stations for a "Voice of the Consumer" program. This active consumer agency is also starting in September a semimonthly bulletin of timely information on consumer problems to 1,000 clubs scattered throughout the State. Arrangements are being made to furnish a consumer news column to local newspapers. Headquarters of the Consumers' Information Service are in the State Department of Agriculture, Hartford, Conn.

This service is one of three operating with the aid of WPA funds. The other two are the Consumer Institutes of Massachusetts, and a consumers' project in Oklahoma City, sponsored by the Board of County Commissioners.

From HIDES to HANDS

Facts about hides and skins to help you get your money's worth in leather goods and gloves

No one knows the name, the cave, or the country of the first man who got the brilliant idea of using the skin of an animal for clothing. But the idea was a good one.

Turning raw hides and skins into sturdy leather is one of the oldest manufacturing processes known to man. In primitive tribes it was the women who skinned the animals and tanned the pelts, sometimes softening the hides by laboriously chewing them. In time someone discovered a swifter and more satisfactory process. To the ancient Hebrews goes the credit of discovering the virtues of oak bark as a tanning agent. Today various barks and woods, as well as many other vegetable and mineral substances, are used in making leather. In ancient days, and in medieval Europe, tanning formulas were guarded as precious family secrets. Many of these formulas have been lost; others have been improved with the years, and modern science has discovered new tanning processes. Modern machinery has taken some of the labor out of tanning and with the discovery of chrome tanning—a chemical process—has telescoped the time it takes to tan a skin.

Main object of the labor involved in changing a raw hide into leather is to preserve it and at the same time give it certain desired physical properties. Softness, flexibility, and porosity may be desired in some cases. On the other hand, as for sole leather, firmness, thickness, and solidity are desired. The chemical composition of animal skin still baffles scientists. They know that it is composed largely of proteins, but just how they are combined is still a mystery. It is the physical structure of skin, the fact that the proteins form innumerable fibers which are staunchly interlaced giving the skin both flexibility and strength, that makes leather such a unique, useful, and workable material. The job of the tanner is so to treat these millions of protein fibers that they will not decay and at the same time preserve and accentuate the natural characteristics of the hide or skin.

Long before the first restless adventurer sailed the Atlantic, the American Indians were using leather for clothing and tepees. Their famous "buckskin tan" is still unexcelled for its softness, pliability, and ease with which it sheds water. Early settlers in need of shoes and clothing bargained eagerly for this leather. In the first part of the seventeenth century welcome arrivals to the New World were men skilled in the art of tanning. Since 1623, when Experience Miller, an English tanner, arrived in the country, the making of leather has steadily developed into an important American industry. Today the United States is the leading leather producer of the world. We tan more hides and skins and make more leather commodities than any other nation. In 1 year we manufactured over 415 million pairs of shoes. In 1936, the value of the products of the leather industry was over 308 million dollars.

Workers in every continent in the world are affected by the United States leather industry. More than 110 countries send hides and skins and tanning materials to us. Though large amounts of chestnut wood and some hemlock and oak barks are produced here, our imports of tanning materials run into millions of dollars. Argentina and Paraguay send us quebracho; Sicily sends us sumac; Asia Minor, Central America, South Africa all contribute tanning agents. Hunters and fishermen in many regions earn their living by snaring sharks, reptiles, kangaroos for American tanners, who turn these exotic skins into leather. South America, Africa, Australia, India, and Europe send us millions of cattle hides and skins of calves, goats, lambs, and sheep each year. Foreign hides and skins which were shipped to the United States in 1936 were valued at $54,770,000. Add to this the hides and skins of millions of domestic animals raised in our own pastures.

Source of the leather industry's most important raw materials is largely the by-product of the meat industry. Most of our leather is made from the hides and skins of animals primarily raised for food. Over 60 percent of the hides used in the United States are known as packer hides. The packer skins the animals, cures the hides and skins, generally by salting them away green, and stores them until they are bought by a tanner. Large-scale production and workers skilled in skinning animals make raw hides from packing houses the most desirable from the point of view of the tanner. Hides are sold by the pound. Average weight of the hide of a steer is 50 pounds. Price fluctuates depending on the market conditions and quality of the hide. Damage from ticks, grubs, manges, barbwire, or branding means a scarred hide and consequently a marked leather.

Tanneries are modest, unprepossessing buildings. A low-flung structure covering the huge tanning vats sunk deep into the ground and providing space for machinery and for men to work is all that is absolutely necessary. In the eighteenth century wooden structures with their telltale odor were more common on the American landscape than they are today. In 1800 there were 2,400 tanneries in the United States. Today there are about 400. But in these modern tanneries many more men are employed and more leather is produced than in the small factories of a century ago.

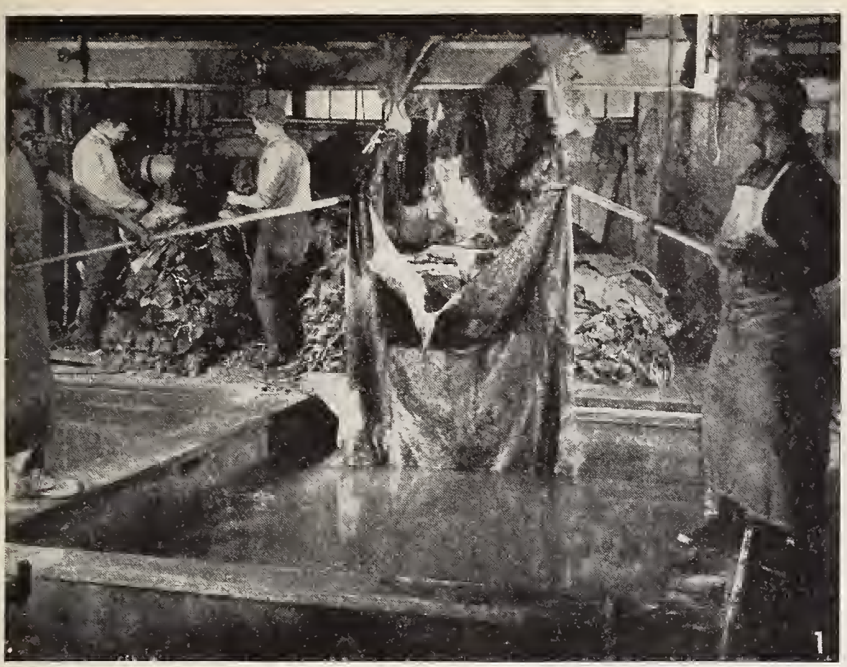
Tanners specialize in making either heavy leather to be used for soles of shoes, machinery belts, harnesses, etc., or in light leathers for upholstery, the uppers of shoes, handbags, gloves, and novelties. Depending on the use to which they are going to be put, the hides and skins may go through from 20 to 80 different treatments—the entire process of tanning sometimes taking as long as 5 or 6 months.

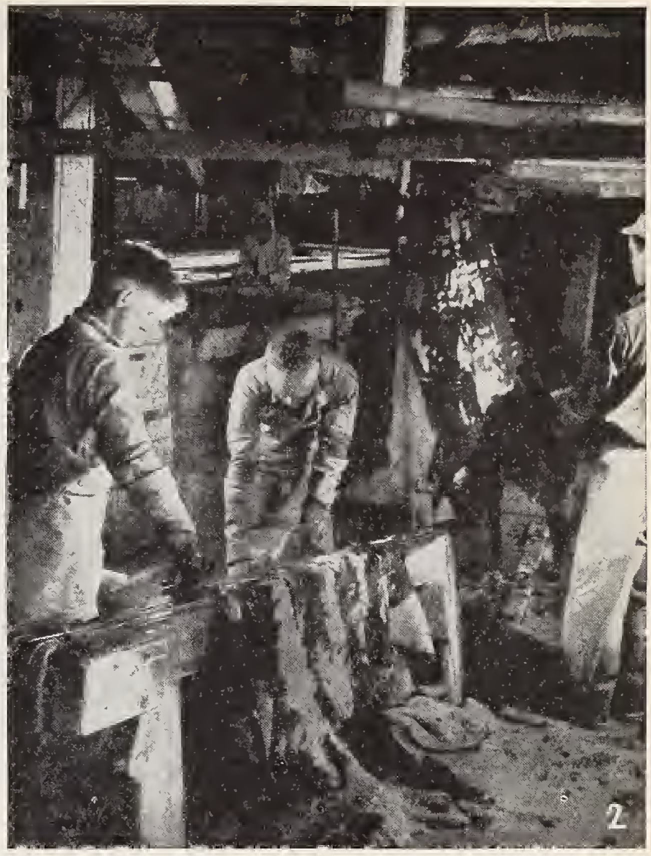
Preparatory work before tanning either a hide or skin is pretty much the same. All of them are submitted to series of baths. Water cleanses them first from dirt and salt. A lime solution loosens the stubborn hairs, which are then removed by hand or by an unhairing machine. Hair from cattle hide is often sold to firms manufacturing ground mats for floor coverings, insulation, stuffing, and low-grade blankets. Fleshings and trimmings from the hide both before and after liming may eventually find their way into your bottle of glue. The hides and skins are then thoroughly cleaned. Skins to be used for light leathers are often pickled in a salt solution. The slimy white shapeless mass lifted from this salt bath is ready at last for the tanning process which will turn it into leather. Many skins, especially those used for gloves, are shipped pickled to this country and the tanning and manufacturing of the gloves are done here.

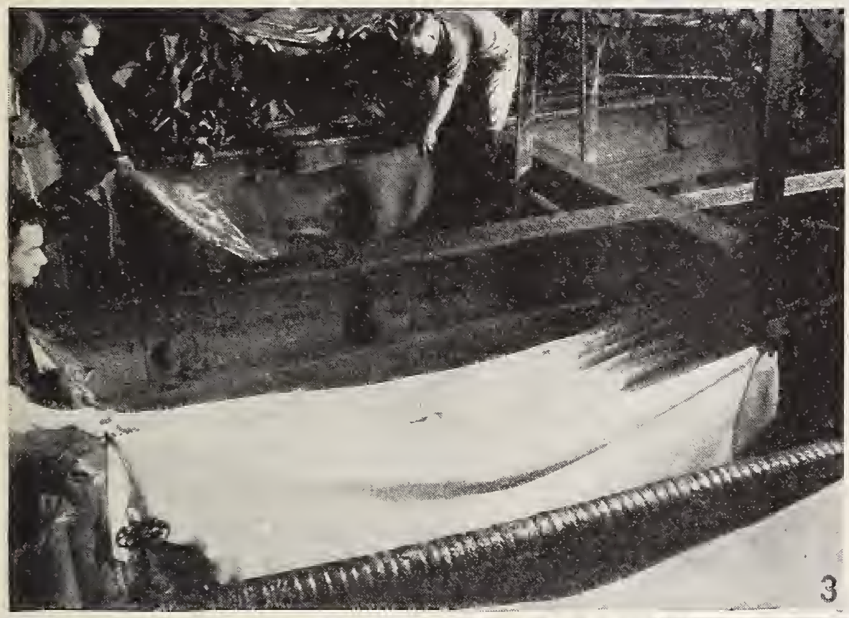
Leather is tanned either by liquors and extracts from barks, woods, fruits and nuts, or by mineral salts, or by a combination of both or by a chamois or oil tannage. Most sole leather is vegetable-tanned—a process that takes from 2 to 6 months. The hides are soaked in a series of solutions graduating from weak to strong until they are thoroughly tanned. Then they are filled with extract, oiled, bleached, dried, and rolled.

Cattle hides are often split into several layers. By means of the splitting machine leather can be split to almost any desired thickness. The machine has enabled tanners to double their output in area of leather without increasing the number of hides used. When the hide or skin is split, the grain split (which was originally the hair side of the animal) brings the best price. Grain leathers, because of the closer-knit structure, are usually more durable than flesh splits from the same hide. Grain leather bears the design of the pores of the hide and skin unless it is concealed in the finishing process. Consumers are familiar with the grain design of some leathers. Pigskin and ostrich leather have distinctive grain patterns which attract the eye. Often a grain design characteristic of one kind of leather is embossed on an entirely different leather.

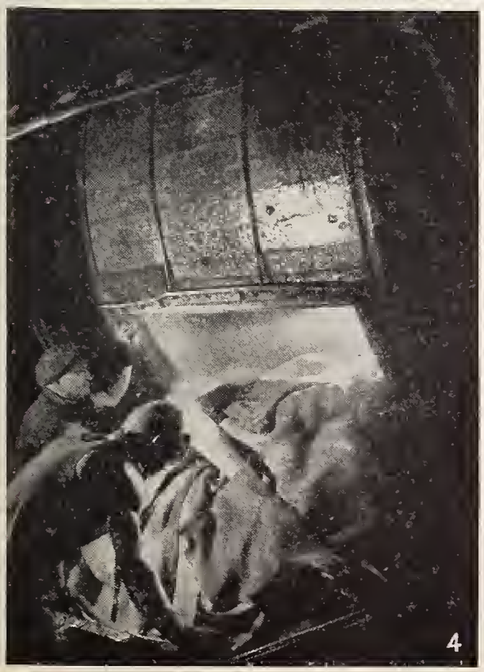
Important American contribution to the leather industry is the chrome process of tanning, in which a salt of the metal chromium is used. A skin, depending upon its thickness, can be tanned by the chrome process in as little as from 4 to 8 hours, but better leather results from a longer processing. Today most of the shoe-

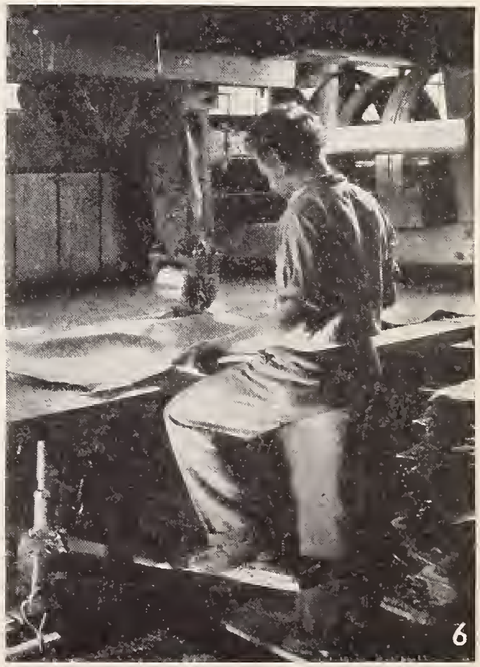






SOME LEATHER PROCESSES. (1) Bunches of hides are immersed in a vat of lime solution. (2) Out of the lime bath, the hides are split through the middle. (3) In foreground, hides are about to be given a 5-week soaking in curing vats, filled with tannic acid; in background, others are being removed after a 5-week bath. (4) In this great drum hides are treated with oil. (5) Close-up of hides in the drying loft. (6) Sponged with hot water, the hide is rolled over and over to give it a glossy finish.





How gloves are made, as well as the quality of the skin, determines wearing quality. Finest gloves are table-cut, and often so labeled. Examine the kind of thread used in sewing, the method of stitching, the type of seam, before you buy.

upper and light leathers are chrome tanned. Sometimes both a chrome and vegetable tannage are used to secure a leather combining the properties of these two processes.

Method of tanning skins white by using alum has been known for many years. As alum-treated leather is easily ruined by water, a combination of chrome and alum treatment is sometimes used for leather for shoes and dress gloves.

Metamorphosis of hides and skins into leather takes place in the tanning vats, but when they emerge they are still a most unattractive material. The tanning agents have removed most of the natural oils from the skin. To give the skins their original flexibility, oils and fats—often yolks of eggs, castor oil, neat's-foot oil, and fish oil—are put back into the skins. This "fat-liquoring" treatment also makes the leather more resistant to water. "Staking" and "plating" and "ironing" follow the oil treatment on leathers to be used for shoe uppers. In these two processes the whole piece of leather is evenly softened, and the stretch and wrinkles are taken out of it.

Leather travels through many skilled hands before it is ready for the manufacturer of leather commodities. First highly skilled process on the program for light leathers is that of dyeing. Sometimes this is done simultaneously with the fat-liquoring. If only the surface is to be colored, the dye is brushed on by hand or by machine. Leather does not color readily. The reasons will not be fully known until the chemical constituents of leather are completely understood. A tribute to the patient and successful experiments of scientist and tanner is the fact that we do have gloves, bags, and shoes in rainbow colors that do not crock.

Finish given to leather, whether it is to be oiled, dyed and embossed, glazed, boarded, or brushed, is primarily dictated by the nature and quality of the leather and the use for which it is designed. Whether leather is finished on the grain or flesh side depends on the methods used. Leather clothing and accessories are more often labeled with the finish than with the type of leather used. Thus suede gloves are made of leather which has been buffed on the flesh side. The consumer recognizes suede by the appearance and feel, but it is the rare shopper who will know whether the suede finish has been applied to goat, lamb, or sheepskin. Yet the kind of leather influences the wearing quality of the article. "Genuine leather" tells nothing of the kind and split of leather of most commodities. In the case of luggage, the Federal Trade Commission has ruled that luggage made of split leather must be labeled "split leather."

Leather can be so embossed that it would take careful examination by an expert to name the animal responsible for the leather. But the name of an animal, even though it has an honorable reputation for yielding fine skins, is not enough to insure the wearing qualities of a particular bag, a pair of gloves, or shoes. Quality depends on the health of the individual animal, the food he ate, the climatic conditions under which he grew. Poor hides and skins, along with poor meat, are a cost of drought. A fine healthy skin or hide is the first essential of good leather. Some parts of a hide make leather of better quality than others. Tanning and finishing processes can improve or detract from the ultimate quality of the leather. Facts on all of these antecedents of a piece of finished leather goods are seldom given the consumer to help him select the product which will give the best wear for the money.

Responsibility for receiving good service from leather articles rests in part on consumers' shoulders. Fine leather has a long life if it is well cared for. It is the oils and fats rubbed into leather which keep it supple and preserve it. In time these are bound to dry out, and the leather needs an additional supply. Shining shoes not only makes them look attractive but preserves the leather. The life of a suitcase can be prolonged with a castor-oil massage. Oiling also tends to make leather more waterproof. When leather does get a soaking it should never be allowed to dry quickly. The best quality leather can turn hard and stiff by exposing it when wet to heat hotter than the hand can stand. To revive a wet suitcase, a pair of shoes, a handbag, first wash them clean, oil them well, stuff them to preserve their shape, and then let them dry slowly.

The "never dry leather quickly" axiom holds for gloves, even those labeled "washable." It is a gamble to wash gloves at all unless they are so marked. How leather for gloves is tanned determines whether water will ruin them.

Most leather gloves are made out of sheep, goat, lamb, and pigskin, but are usually trademarked by the name of the finish. Suede gloves, as indicated previously, may be made either from lamb, sheep, or goat skin, finished on the flesh side. Glacé, or glossy finish, is usually applied on the grain side. As scars and other defects on the skins show through the glacé finish, the most perfect skins are reserved for this type of glove.

Glacé kid is the high-brow of gloves used for dress by both men and women. "Real kid" is made from immature goat or kidskins. Gloves made of lambskin, which is a fine lightweight pliable skin but has a looser grain than young goat and scuffs more easily, are sometimes sold as kid gloves.

Locales famous for producing a certain type of goat or sheep often become the name of a certain kind of finish. "Cape" gloves at one time meant gloves made from the skins of a certain kind of sheep raised in South Africa and shipped from Capetown. Now "Cape" is a name given to gloves made from many varieties of sheepskin. The same is true of the costly mocha gloves. Original source of mocha leather was the Blackhead sheep raised near the town of Mocha in Arabia. Usage has made "mocha" the name of a soft velvety finish.

Thickness of leather is not a sign of strength in gloves. Thick leather may be stiff and boardlike and tear easily. Fine leather, either thick or thin, when drawn through the fingers will feel "alive." Even if it is thin it will be soft and supple and have body to it.

Wearing quality of gloves depends on how they are made as well as on the quality of leather used. Poorly cut gloves, even if made from the finest leather, may give unsatisfactory service. Most costly gloves are usually table cut, meaning that the process has been done by hand and the leather used in each pair of gloves has been handstretched so it has just the right give to it. Most gloves are pattern cut or machine cut. Finest American gloves which are table cut are often labeled as such.

Kind and quality of thread used in sewing a glove is important. Method of stitching and type of seam influences both the strength and beauty of the glove. Gloves are either machine sewn or hand sewn. Hand-sewn gloves are usually the most costly. Machine-sewn gloves are done with a lock, chain, or triple stitch. The latter technique, used on gloves of heavy leather, makes a practically rip-proof seam; for every two stitches forward one is taken back, so that each stitch is tied and the thread cannot ravel.

Seams are sewn on the inside or outside of gloves. Outseams are generally more lasting. Most difficult seam to make and one that is the most durable is the pique—in which the sides are sewn together by the chain stitch, but one edge of the leather slightly overlaps the other, exposing one raw edge. Overseam, in which the two edges are sewn together on the right side by an over-and-over stitch, used on dress gloves, makes an attractive glove. In buying them care should be taken to see that the seams are wide enough, otherwise they are apt to pull out.

To get good wear out of gloves, fit is important. Gloves should always be tested on whichever hand is the larger; with most people that is the right hand. Too small gloves mean burst seams and in time exposed fingers, as well as discomfort. Loose-fitting gloves are the best choice from the standpoint of wear and comfort. Moving space for the fingers means less strain on seams and leather. They are also warmer in the winter and cooler in the summer, as they allow for the evaporation of perspiration. If the glove is clasped or buttoned, the fastener should be about one-half inch below the ball of the thumb.

Making gloves is a complicated process, sometimes requiring more than 50 different operations. From the history of the industry, one surmises that glove making gets in the blood and is transferred from generation to generation. In the twelfth century a group of Scotsmen living in Perth received a charter from William the Lyon, King of Scotland, giving them the right to make gloves. Their descendents ever since have been making them. Some of these Highlanders emigrated in 1760 to Fulton County, New York, and made that place the heart of the United States glove industry. Their descendants living in Gloversville and the vicinity are the skilled glove makers of today.

Next issue of the CONSUMERS' GUIDE will give tips on selecting shoes.

Champion dessert pears include the Beurre Bosc which comes in these sizes. Juicy, piquant, fragrant—at its best in fall months.

PEARS APLENTY

Largest crop on record is the experts' forecast for this succulent fruit, now rushing to consumer markets

Bite into a pear and be glad that you are living in the twentieth century. It wasn't so long ago that this melting "butter-fleshed" fruit was unknown, although pears of assorted shapes, sizes, and flavors grew long before that. However, these earlier pear varieties were crisp-fleshed, the so-called *crevers* of the French. Not until the first half of the nineteenth century did the Belgians perform the experiments that were to transform this fruit into its present luscious form. Then the fad of pear breeding struck amateur Belgian horticulturalists with all the force with which the candid-camera craze has swept our United States.

Two classes of pears grow in this country—the European and the Asiatic. Most of our pear varieties, including the popular Bartlett, belong to the first class. Such hybrids as the Kieffer combine both types. Remote as the connection seems, all pears are members of the rose family.

Best known of any pear is the Bartlett, a large handsome fellow that has been appearing at market for the last 2 months. In 1817 when Enoch Bartlett, of Dorchester, Mass., acquired an estate having on it some fruit trees, he would have been as surprised as his neighbors to learn that the pears he sold under his name would prove a sensation in the fruit world. But such was the case. This pear is golden yellow, with a reddish blush on the sunny side and a stippling of russet dots over all. The white flesh is fine-grained, though inclined to be granular at the center. Juicy and sweet, the Bartlett when well-grown sets a standard for fresh shipping pears that is hard to beat. In canning, too, it takes highest rank. On the Pacific coast the Bartlett is the first of the important commercial varieties to ripen, its picking season lasting from early July to late August. Two months in cold storage prolong its life as a fresh fruit until mid-October. The trees bear young and live long. Boon to the grower is their ability to adapt to a variety of soil and climatic conditions; despair of the grower is the Bartlett's susceptibility to blight—the black plague of the pear crop.

Consumers looking for the best in a dessert fruit should turn their attention to the Beurre Bosc. There is no mistaking the distinctive shape and color of this fruit. A long tapering neck leads to a full, perfectly symmetrical body. The rich yellow background of the skin is overlaid with russet. Fall months find the Beurre Bosc at its best—juicy, richly piquant. and fragrant.

Seckel alone surpasses the Beurre Bosc in eating qualities. This is the little, ruddy fruit so delicious in preserves, pies, or eaten fresh. Were the fruits larger, Seckel would play second to no other fruit where popularity is concerned. Seckel pears have a smooth dull skin of reddish brown. Not notable for attractive coloring, the Seckel has, however, a pleasant trim contour. The juicy flesh has a delicate perfume and a spicy flavor. Because much of the aromatic tang lies in the skin, Seckels should never be peeled before eating.

Several other pear varieties deserve honorable mention. Clapp Favorite is fine for local trade but cannot stand shipping—in this respect unlike the Bartlett which it closely resembles. Look for this variety during late summer. Beurre d'Anjou is best of the early winter pears with its large smooth fruit borne on a stubby stem. The yellowish-white flesh is firm, tender, and of a heavy vinous flavor. For cooking and home canning the Kieffer deserves a good reputation, the product keeping its shape and color well. Proper ripening in storage will remove the astringent taste and coarse texture that have proved drawbacks when the fruit was eaten fresh. This pear ripens in late October and November to above medium size. Most widely distributed winter pear on the Pacific coast and one of the best for storage is Winter Nelis. Though harvested in September, this is the dessert pear that consumers will depend upon from Christmas until late spring.

Consumers who pick out fresh pears for eating shouldn't try to judge the fruit by color unless they are familiar with the pear color palette. According to variety, some pears may be ripe when still green, though other varieties may be immature even though the fruits have reached a high yellow.

Best buys in pears are generally firm, but not hard, and free from blemish. Press your thumb against the base of the stem. If the pear yields to the pressure, the pear is ripe for immediate eating but too ripe for future use.

Some pear varieties suffer from "scald"—a transportation and storage disease caused by gases given off by the fruit. Severe scald cases leave the fruit skin badly discolored, flesh decayed. Another form of injury to watch out for is "limb rub", left by a tree limb rubbing against the fruit in the course of development. This appears as a roughening on the surface of the fruit and may cause hard woody spots in the flesh. As with all fruits, avoid wilted or shriveled pears.

The pear is normally picked when slightly immature and ripened in a cool dark place. Storage-ripened pears, moreover, have a finer texture than the tree-ripened fruit. However, with Bartletts the custom seems to have been to pick them too immature. To determine the exact time of picking maturity, growers in the Pacific States use a mechanical tester—a metal gadget that measures in pounds the pressure required to force a smoothly rounded plunger into the fruit to a definite depth. Through experimentation, growers are finding the pressure readings required by the different pear varieties.

By no means all pears reach the markets as fresh fruit. Estimates gave the annual per-capita consumption of commercially canned pears in 1934 as roughly a half pound—about one-fifth that of peaches, kingpin in the canned-fruit world. Canners put no premium upon pears of particularly fine flavor. What they are looking for is a fruit creamy in color tending to translucence, of tender flesh but with enough body so that there will be no disintegrating.

Quality grades for fresh pears, as for most fruits, have been set up by the United States Department of Agriculture. Though the use of these grades is optional, they are the basis of much of the trading in the wholesale market. Consumers benefit indirectly since, by means of grades, retailers can stock products of nearly uniform quality. Fresh pears fall under the classifications U. S. No. 1, U. S. No. 2, and U. S. Combination Grade.

Canned pears have their own quality grades, based on color, uniformity of size and symmetry, absence of defects, and character of fruit. Top quality under these U. S. Department of Agriculture standards is "U. S. Grade A (Fancy)"; second comes "U. S. Grade B (Choice)", followed by "U. S. Grade C (Standard)." Grades below that hardly interest the consumer who is looking for pears for table use.

With pears plentiful, thoughts of homemakers may turn to home-canning ventures. For consumers who, having weighed the relative advantages of the homemade as against the commercially canned product and having counted costs of labor, equipment., etc., decide to try their own skill, here are a few hints that do not appear in every cookbook. To keep pears from turning dark while they are being prepared for canning, drop each piece of peeled fruit into a solution of water, vinegar, and salt for a short time. Exact proportions read 2 tablespoons of each of salt and vinegar to each gallon of water. Remember this tip when it comes to canning apples, peaches, and apricots, too.

Consumers planning to put to use those hard Kieffer pears growing in the home orchard may be interested in this suggestion: Investigations at the Department of Agriculture have shown that Kieffers improve in quality for canning by standing 2 weeks in a cool place (60° to 65° Fahrenheit). Storage improves flavor and texture.

Pears can be packed in tin cans as well as in glass jars. Plain tin cans of either No. 2 or No. 3 size will do. You can pack the pears raw in

[Continued on page 18]

WHAT PRICE MILK?

Back of city milk plants are hundreds of thousands of dairy farmers whose living depends on fair prices for their product. In this third of our series on "Milk for Millions" we dig at the roots of their problem

CURRENT among impertinent small boys 15 years ago was the impudent question, "What does that have to do with the price of eggs?" Current question of bewildered milk consumers today, intent on finding out the whys and wherefores of milk price is, "What *does* have to do with the price of milk?"

Back of milk prices, as of other prices in our system of supplying human wants, are those two famous characters of all our economic dramas, Supply and Demand. Let Supply represent in this drama the amount of milk which farmers are willing to produce and Demand the amount of money which consumers are willing to pay for milk. Supply wants to get as much money for as little milk as possible. Demand wants to get as much milk for as little money as possible. Were this a play of two simple characters all by themselves there would be little excitement. Between them, they could quickly work out a compromise as to the amount of milk which Supply should produce and the amount of money that Demand should pay.

Supply and Demand in this modern age are not two simple characters who strut on the stage and fight out alone the battle of price. Almost never are they the sole characters in our economic dramas. Indeed, one of the greatest offenses committed against consumers is to make it appear that the every price they pay is fixed by a "law of supply and demand" and therefore cannot be questioned. Many who talk about such a law would have consumers believe that, like gravity, this is a rule of Nature's about which humans can do nothing. Practically never are prices determined by the free play of such a simple "natural law."

Many other characters play important roles in this drama of milk prices, each of them reacting on or conditioning the principal characters, Supply and Demand.

First on the list are those affecting Demand. Milk, we have come to believe, is not like Thanksgiving turkey, a food for festivals. Consumers want it every day, and they want it fresh. Furthermore, they want not only milk but cream for their coffee, butter for their bread, ice cream for dessert, or a piece of cheese with pie or cheese for dinner dishes when meat supplies run low.

All of these are milk products. They compete with each other and with fluid milk for the money consumers are willing to spend for the product of cows. In addition, modern consumers want their milk pure and are willing to pay more for sanitary milk.

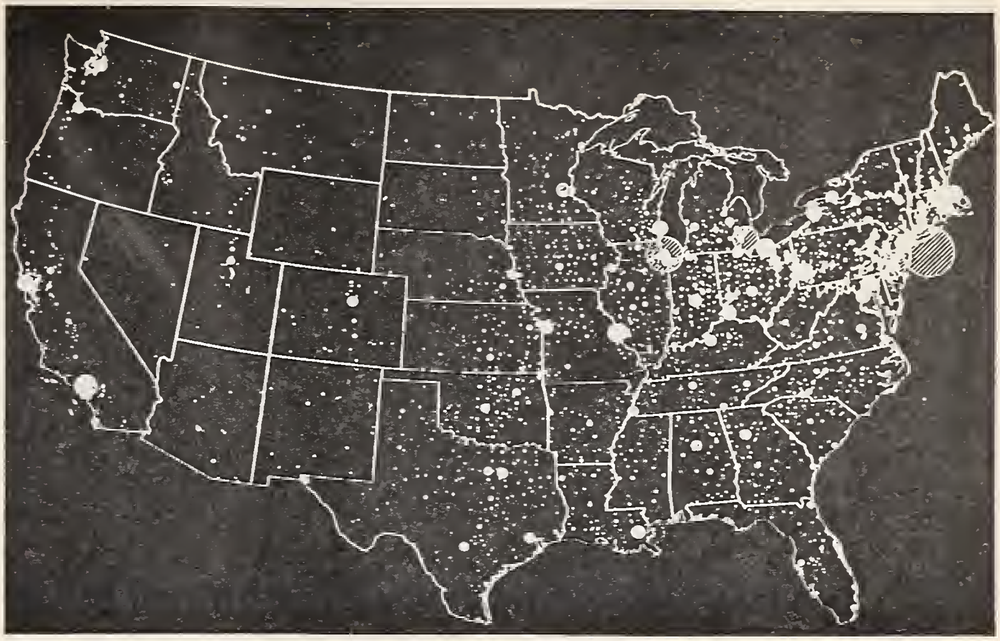
Nor is this all. Other foods compete for a share in consumers' pocketbooks with milk and its products. How much consumers can pay for milk depends partly on the cost of these other foods. Back of that, how much they have to spend for food depends, in part, on how much other necessities cost. Behind, is the cost of living in general in relation to the incomes consumers have to spend. And above and around consumers' *capacity* to spend money for milk or for anything else are all kinds of forces working on their *desire* to have this or that, to do this or that, to be this or that.

These, in the large, are man-made, not nature-made forces and conditions. They all act to set a top limit to the price that consumers are willing to pay for milk and milk products. Let anything come along to change any one of these factors and sooner or later the price of milk changes. Still more numerous are the forces tugging at the coat tails of Supply.

Between consumers and suppliers of milk are processors and distributors. The cost of their services is a first charge on the price consumers pay for milk and milk products. In chapter II of this series (CONSUMERS' GUIDE, Aug. 23, 1937) we discussed some of the wastes in the way milk is now distributed in some cities. Unnecessarily high costs of processing and distributing milk may not only cut down the amount of milk consumers can buy but also reduce the amount of milk farmers can sell. Both farmers and consumers have a large stake in the efficiency of the middlemen between them.

Again, both consumers and farmers have much at stake in the price which processors and distributors pay to farmers for the raw material of consumers' milk products. This price not only is a charge on consumers but it may encourage farmers to increase their supply of milk or discourage them from doing so. More than any other agricultural product, milk is subjected to man-made controls. Let's see how these operate.

How many cows there are and how much milk each of them gives is, of course, the first fact that determines how much milk can—if farmers wish to sell it—come to market. Nature has something to say about both. Weather can increase or decrease the number of cows and the amount of milk they give by making feed expensive. Consumers felt the blow on their pocketbooks when the great drought of 1934 forced farmers to slaughter many of their cows and made feed costs so high that many farmers could not afford adequate rations for their herds. The result was that the supply of milk was cut drastically, and prices shot up. Indirectly, too, by making it relatively less expensive to raise milk cows than to raise meat animals, weather conditions can boost the amount of milk we get or, if the reverse happens, can cut that amount. Farmers can, if forced, shift from one type of production to the other.



Dots in this map represent concentration of population. The bigger the dot and the closer together, the more consumers of milk. Concentration of cows duplicates largely concentration of population, except in the great North Central dairy States.

Milk is produced all over the country. In every State there are cows whose milk is not needed at home and is, therefore, available for sale. But some sections of the country have many more cows than have others. Credit nature again for the fact that our cow population is densest in the northern States east of the Dakotas. Dairy farms tend to concentrate there because the climate is favorable, pastures are good, and feed is cheaper. Another reason is because that's where human population is concentrated and therefore where markets are best.

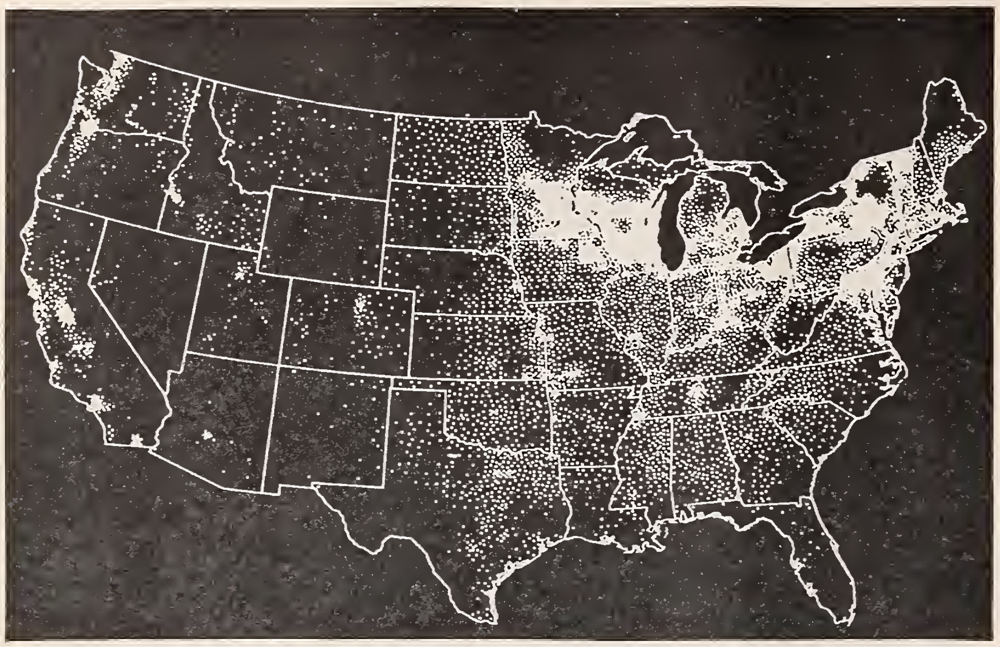
These two reasons for locating the cow belt in the area from Minnesota and Wisconsin on the west to New Hampshire and Massachusetts on the east press unequally on the two ends of the belt. The eastern end is conveniently near great markets, but it costs more to feed a cow in the East. The western end is not conveniently near great markets, but it has the advantage of lower feed costs. With production abundant and markets distant, the great dairy States of Iowa, Minnesota, and Wisconsin specialize in manufactured dairy products which are not as perishable as fluid milk, can be stored for long periods, and are not so expensive to ship hither and yon over the country.

Dairy States set the pace for all other dairy farmers. Their costs of production are lower, and so their milk products compete in price with milk products produced everywhere else. In 1933, 45 percent of all the creamery butter products in the United States was made in Iowa, Minnesota, Nebraska, and Wisconsin; 62 percent of all the cheese produced was made in Wisconsin and New York; 53 percent of all the evaporated milk was produced in Wisconsin and California.

Now if costs of production were the only thing determining the price farmers get for milk, consumers might expect that these low-cost dairy farms in the big dairy States would supply them with all their milk and manufactured milk products. But production costs are not the whole story. Other costs enter into the picture.

Carting milk from cows to kitchens costs money, and the farther apart they are the more it costs. Farmers living close to markets have the advantage of less expensive delivery. They have a disadvantage, however, in higher costs of production; land costs more, feeding cows costs more. In milk markets free from trade restrictions, therefore, fluid milk can be produced near a city only so long as farmers can counterbalance their higher production costs with lower transportation costs. The farther from the city the farmer is, the higher grow transportation costs and the lower are returns to farmers.

Most expensive of all forms in which to ship milk is fluid milk. Some 87 percent is water. Squeeze out the water and you get a more concentrated product which is relatively cheaper to ship. Cream is a less expensive form in which to ship milk; butter and cheese still cheaper.



The "cow belt" stretches from Wisconsin and Minnesota on the west to New Hampshire and Massachusetts on the east. The eastern end is conveniently near great markets; the western end has the advantage of low feed costs. Each dot represents 2,500 cows.

When farmers outside of a city find that transportation costs eat up too much of the money they get, instead of shipping whole milk, they separate off the cream, feed the skim milk to the livestock, and ship cream into the city. Since cream is more compact, more valuable per pound, than milk, the farmer at this distance from market makes more than he would if he shipped the whole milk.

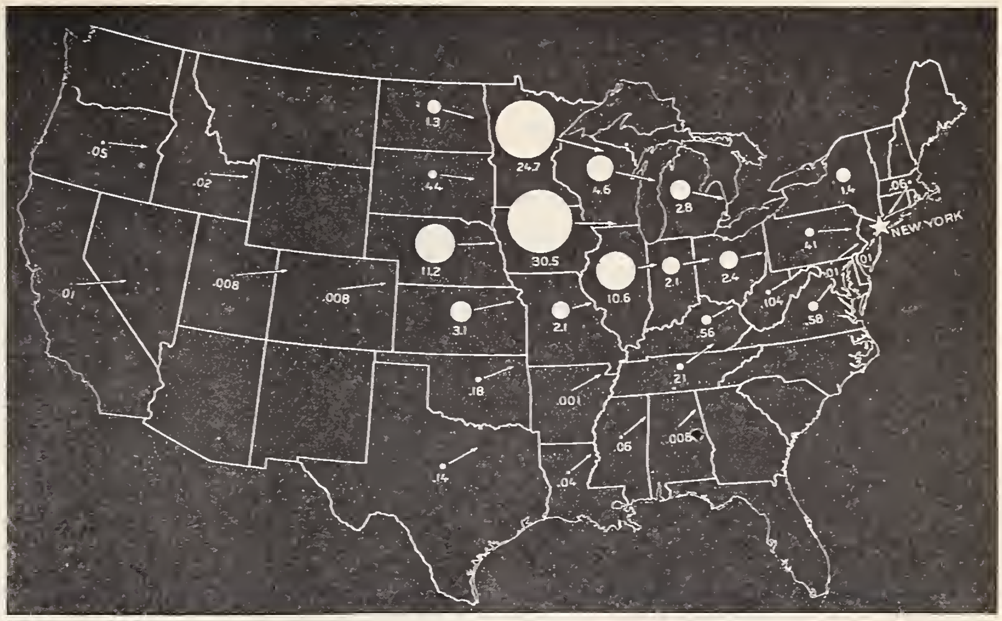
Competition becomes keener for the producer of cream, for the wider the circle grows the greater the number of farmers competing for a particular market. To be able to sell to such a market the farmer must always have an advantage either in production or in transportation costs—provided trade restrictions do not give him extra advantages. Stretch the circle still wider, and the farmers on the outer rim find it cheaper to ship milk as butter because transportation costs of this form of milk are still lower than for cream. For these farmers competition becomes keenest of all, because their product must compete in price with butter made everywhere, including butter made in dairy sections where costs are lowest. Economic pressure of costs of production and transportation is not the only factor determining the price of milk. Milk for fluid purposes is more expensive to produce than milk for other purposes. Requirements of city milk ordinances lay additional costs on dairy farmers.

Reasonable sanitary protection of milk supplies is a good thing, because milk not only is a necessary food but easily contaminated. Sanitary protection in some cities is not stringent enough. Sometimes it becomes unnecessarily protective of public health and acts to reserve city milk markets for neighboring dairymen, as milk inspectors themselves have pointed out. (See CONSUMERS' GUIDE, Aug. 9, 1937.) At such times it is like a tariff barrier, keeping out milk from distant low-cost production areas. Ordinarily city health regulations for milk apply only to milk for bottling; sometimes they may apply to milk for cream; practically never do they apply to milk that is to be used in making butter or other milk products, although some States have regulations governing manufacturing milk. Because milk ordinances are not the same in every city, farmers supplying one city cannot easily shift to supplying another city, though there may be economic inducements to do so.

If sanitary requirements for fluid milk were made uniform throughout the country, the "law" of supply and demand would be freer to operate, and in many localities the cost of a bottle of milk should come down, although markets not now operating under satisfactory regulations might have to pay more for their safer milk.

Nature comes along to complicate the problem of fluid-milk prices still more. Most cows have calves in the spring. When grass is greenest feeding cows is cheapest. When pastures grow bare, farmers, have to buy more feed for their herds. Both because of spring calving and cheaper feed, milk production has its peak in May and June, its low in October and November. Consumers, on the other hand, demand a fairly steady supply of milk, winter and summer. Their purchases do not go up and down with the seasons as much as does production.

To meet consumer demand for milk in October and November, when production is lowest, a city milk company may contract to buy milk from, say, 10 farms. When May and June roll round, the milk company finds these 10 farms are supplying about 30 percent more milk than they did in the winter months. There are two ways in which the city milk company might face that situation: one, they might say to the 10 farmers: "We don't need all your milk now, so we will buy from only seven of you." If they did that, the three farmers who thereby lost their market in summer would not be able or willing to sell again next winter. City consumers, in that case, would be out of luck 6 months later when



Most cities depend heavily on mid-western dairy States for butter. This map shows areas shipping butter to New York City. Two States—Iowa and Minnesota—furnish 55 percent of New York City's supply in normal years; New York State supplies less than 2 percent.

they want milk just as much as they do in summer.

Suppose, instead of cutting off the three farmers, the city milk company tries the second way out: buys all the milk the 10 produce, winter and summer. The extra 30 percent in summer must be disposed of. One way would be to slash the price of a bottle of milk in the hope that consumers, being able to buy it cheaper, would buy up the extra supply. Another way is to manufacture the extra milk into milk products and sell them. In actual practice most milk companies do the latter, since consumers probably couldn't be induced by the price cuts distributors could make to drink all the surplus. In some markets attempts are being made to induce farmers to get the better of nature by arranging that some cows give birth to calves in the fall, so that their herds will produce milk evenly the year round.

Now, the fluid milk which the company sells does not have to compete in price with fluid milk sold in other cities. But the milk which the company turns into manufactured dairy products does have to compete with milk produced elsewhere. It has to compete in price with milk produced in the very cheapest production area, because manufactured milk products—not restricted by sanitary regulations, and cheap to transport—can be shipped anywhere in the country to undersell any competitors.

Because of these different kinds of competition, the milk company can pay a higher price for the milk that goes into bottles than it can pay for the milk that is, say, powdered or condensed. But the farmer, supplying fluid milk, victim of this competition, naturally complains: "It's all the same milk. It cost me just as much to produce one batch as the other. What about me?"

Questions such as this lead to over-the-fence conversations between farmers. Out of such conversations have grown milk-producer cooperatives—organizations of farmers around a city who realize, much as factory workers have come to realize, that in "union there is strength." Together they can bargain with city milk companies more advantageously than can individual farmers, competing with each other. Most city milksheds (the area from which cities draw their fluid milk) have these bargaining cooperatives which add a new element of control in the price of milk.

Human control of prices must always compete with economic control of prices, unless the humans have a monopoly control of supplies. Just as workers lose strikes for higher wages when employers are able to hire nonstrikers for less money, farmers fail to get higher prices for their milk when city milk companies can buy milk for less money from an unorganized farmer. In attempting to organize, therefore, producers' cooperatives did everything they could to bring all the farmers in the milkshed into their organization. City milk companies, just as naturally, in those early organizing days kept looking around for farmers who were not cooperators with whom they could bargain for milk at a lower price.

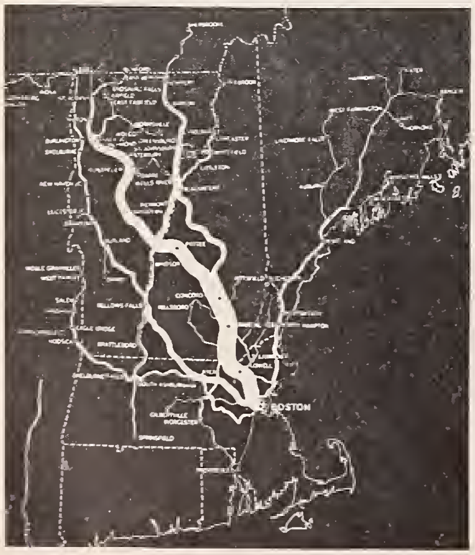
Whether or not this mutual struggle—or the struggle for membership between competing co-ops—is responsible for increasing tremendously the flow of milk into the cities, the fact is that in most cities the volume of milk pouring in is much more than enough to fill all the milk bottles which consumers now buy. It is equally clear that the larger these "surplus" supplies are the more stresses and strains are put upon the human controls over prices.

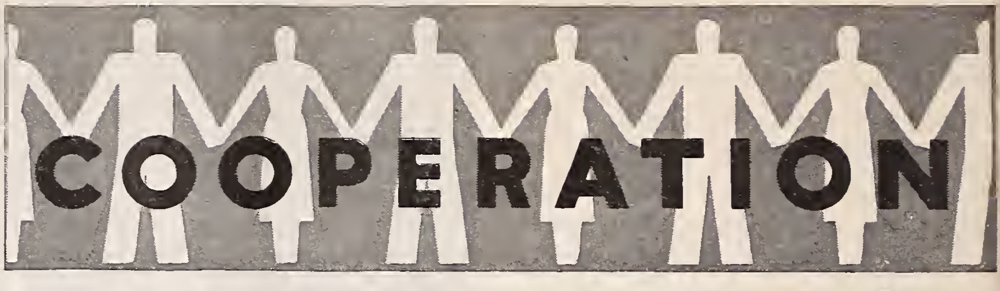
Years of struggling have been followed in most markets by years of negotiating. Where possible, city milk companies and producers' cooperatives work out between themselves a mutually satisfactory agreement to supply so much milk and to pay such and such a price. Consumers, as always, are the ultimate payers of such a price, but seldom are they parties to the working out of producer-distributor agreements. Because consumers are not heard from, the temptation arises for producers and dealers to compose their differences by pushing up consumer prices. This temptation, when indulged, may resolve for a while the problem of adequate prices to farmers, but the cure may be temporary only. For when prices unduly high bring about an increase in supply, this greater supply eventually forces a change in pricing policy. Meantime, however, these ups and downs may undermine the strength of producer co-ops as bargaining agents. Thus each in his own way, producer and consumer, can be injured by prices that are too high.

When amicable agreements are difficult to arrive at, and the struggle for what farmers believe to be a fair price becomes too hard, then they turn for help to a third party—the State or Federal Government. Thus, laws creating milk boards or milk administrators and laws controlling prices have come about. Despite the fact that they must foot the bill and are as much concerned as producers and distributors in how

[Concluded on page 16]

Rivers of milk and cream, not actual but figurative, flow into Boston from no less than five States surrounding Massachusetts. The thickness of the white lines shows the relative importance of the sources of supply. A city's milk supplies come from outlying areas; some cream comes from more distant places; much butter comes from the Middle West.





COOPERATION

From neighborhood clubs to billion-dollar business, farmer and consumer purchasing cooperatives make news

Joining up with a going concern, most cooperators admit, is a lot easier than getting an enterprise started. Cooperative literature is meager on the early growing pains of its enterprises. The Consumers' Guide told in detail (May 3, 1937 issue) the week-by-week development of a cooperative grocery business in Washington, D. C. Now comes another tale of beginnings from a farm woman in Pennsylvania. Her husband is an active official of a marketing cooperative.

"Important as is the marketing cooperative, it cannot go all the way and tie up with the consumers until they, too, organize", this pioneering woman writes. "This past summer we made the plunge. With a friend, who is also keen about the idea, I sent post cards to 15 neighbors who had at some time expressed an interest in cooperation, asking them to meet at our house to discuss doing something about it.

"To our delight 18 people gathered that first evening and, as a starter, we enrolled 9 members, each representing a family and paying $3 annual dues. There was much interested discussion. Some felt we should be a study club for a while; others that we must study, of course, but not try to 'learn swimming by the piano-stool method.' We decided to tackle some buying together to get wholesale prices for tested goods. At the same time we would study our needs as to coal, fuel oil, laundry, and gasoline, and try some collective bargaining for the needs of the entire group in those things.

"We grew to 30 members almost at once, and for the first 2 months met weekly at members' homes, though normally we felt a monthly meeting was best. We took out two shares at $5 each in Cooperative Distributors, New York, to which a few members already belonged and which has as its chief objective education with mail orders of tested articles as additional service. They in turn are members of the Cooperative League, so we tie up with the movement as a whole. As an associate member of Cooperative Distributors, we received from them a carefully worked out constitution and sample purchasing contracts for coal, laundry, and other items.

"We began business by buying 100-pound lots of soap through Cooperative Distributors, later adding many other things. From Eastern Cooperative Wholesale we purchase case lots of nonperishable groceries, such as canned goods. A local mill supplies flour, corn meal, and other supplies from grain we buy or grow.

"Our first local purchasing contract was for coal. Each member filled out a questionnaire as to amount and kind of fuel probably needed for the winter, previous dealer, quality of his coal and service, and other necessary data. To all dealers with satisfactory records we sent a form letter stating our bulk needs approximately, requesting specifications of their fuel, market retail price, and what saving we might expect in return for this unsolicited bulk buying and cash payment. We found all coal practically the same, as the anthracite region is a small one, and it was good to find the lowest bid was from a dealer practically in the center of our area and with a perfect record for service.

"Next we tackled fuel oil, then laundry, and are working on groceries and gasoline. In each case, upon the signing of the contract, the dealer receives a list of members; members place their own orders, pay the retail market price, and the dealer sends a monthly statement and a check for savings to the club treasurer. The club, of course, assumes no responsibility for members' bills, except that if any member gets over 30 days behind, he loses all club buying privileges until he catches up.

"So we are embarked on an effort to study and analyze the problems of producer, distributor, and consumer in order to tackle wisely our common course as ultimate consumers. It is hard, painstaking work to build soundly step by step, to curb enthusiasm from taking us too fast, to develop courage against criticism when unfair and wisdom to use it when of value, and to study and work steadily as fast as our limited time, energy, and means will allow. It is tremendously challenging and is, also, specially satisfying in the way it cuts across all the usual barriers of small neighborhood groups and enlists people of such varied capacities and interests in a common effort to make the most of our resources, both human and material.

"We were very proud of our first payment of savings returns, but I am not sure it might not have been wiser to hold them for expansion in the early years of a club.

"We now have 60 members and are studying possibilities of a gas pump of our own with an office usable as a depot for handling case lots of groceries as well as gasoline, oil, and tires. We badly need a working center, but refuse to take on regular expense until we see quantity of business furnishing sufficient margin to cover such expense. However, we have great hopes of achieving it by the beginning of our second summer, for business and consumer interest are growing."

Borrowing a well-tested educational idea, cooperators open their first national training school on October 11, in New York City, at which students will first have an intensive training period for 8 weeks, and follow that with 8 weeks in cooperative business, so as to test theory against practice. The Cooperative Institute, as the new school is to be known, has been established by the Cooperative League of the U. S. A. Class work will be done in New York City; field work will be done there and in other eastern cooperatives. The registrar of the new school is himself now completing a course at the Cooperative College, Manchester, England.

Cooperative buying for farm production marches on! Last year 73,000 members of Eastern States Farmers' Exchange of Springfield, Mass., obtained through their cooperative, 366,140 tons of feed, 41,723 tons of fertilizer and liming materials, 5,343,282 pounds of field seeds, 192 carloads of seed potatoes, and large quantities of miscellaneous farm supplies. Machinery to make this service possible includes 26 field men, 567 representatives, and 33 Eastern States service warehouses. Among this group are a considerable number of local cooperative organizations.

Nearly 160 cooperative stores and buying clubs in the East now use the services of the Eastern Cooperative Wholesale, in New York City for their supplies. A year ago its services were used by only 30 cooperatives. Formerly acting as a broker for retail stores, the Wholesale now distributes its own co-op label products. Its co-op label lines include 155 products. Business during the first 4 months of 1937 totaled $160,900 as against a little over $85,000 in the same period of the previous year.

European cooperators reviewed in our July 12, 1937 issue ("Six Americans Look at European Cooperatives") apparently don't let the grass grow under their feet. Figures on 1936 business, released recently by the International Cooperative Alliance, show these gains:

SWEDEN.—A membership boost of 17,000 in 1936, bringing total membership up to 585,000, or more than one-third of the families in Sweden. Cooperative business increased $6,917,000 to total $111,494,000 in the past year.

NORWAY.—Membership swelled 10,000 to a new total of 148,000, approximately one-fourth of the nation's families. Retail cooperatives did a business of $12,400,000, 12.4 percent greater than the previous year. More than 44 percent of all commodities handled through cooperative stores were produced in factories owned by the co-ops. Cooperative production in 1936 exceeded $5,000,000 for the first time in Norwegian cooperative history.

FINLAND.—Membership reached 273,000, a gain of 8,000 members in the year. With the opening of 136 new stores, business of retail co-ops increased 12 percent to a total of $30,000,000. Finland's cooperative wholesale society did over $5,000,000 worth of business, which was 27 percent more than 1935's trade.

CZECHOSLOVAKIA.—Retail co-ops, affiliated with the central cooperation union of the country, report a membership of over 380,000 and a business of $35,000,000. The co-op wholesale business in 1936 came to $7,800,000.

FRANCE.—The cooperative wholesale society in this country boosted its sales 13 percent to $56,000,000. Hitherto small producers of the goods they sell, French cooperatives last year manufactured commodities valued at $3,500,000 for distribution through their retail stores.

GREAT BRITAIN.—Giant of all cooperatives, the cooperative movement in this country added 330,000 new members in 1936 and brought their total up to 7,815,000. Business swelled $70,000,000 to an aggregate for the year of $1,170,000,000.

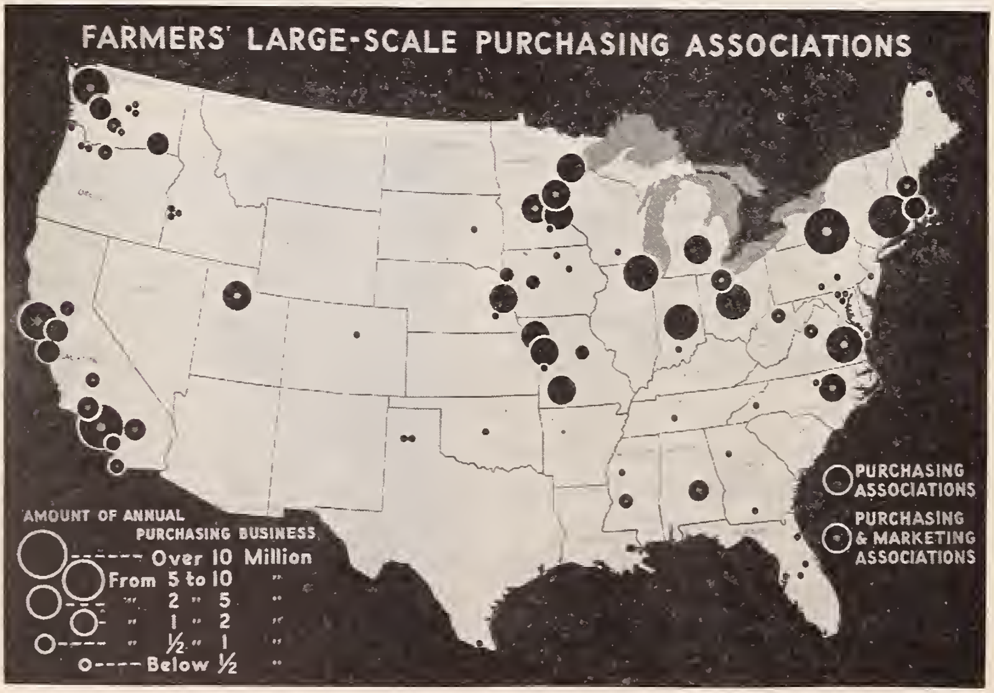
Scottish people seem to be as "sold" on the cooperative way of doing business as are their English neighbors. Eighteen out of every 100 people in Scotland are members of cooperatives, and in one county the cooperatives claim 42 out of every 100 citizens. Last year's sales by the Scottish Cooperative Wholesale Society topped 100 million dollars. Fifty factories are operated by this cooperative to produce food, clothing, furniture, drugs and cosmetics, tobaccos, candy, and other consumer goods. A separate organization, the United Cooperative Baking Society of Glasgow, supplies bakery products to most of the local societies throughout the country. Each week it grinds many thousands of bushels of wheat which it imports from the United States, Canada, the Argentine, and Australia. The wheat, ground into cooperative flour, baked in cooperative ovens, sold in cooperative stores, goes to cooperative members at 15 cents for a 4-pound loaf, and members get back a 12½-percent patronage dividend on all their purchases.

ESTHONIA.—Largest percentage gain in business of any country was recorded by the Esthonian wholesale cooperative with an increase of 29 percent.

Substantial gains in business are reported, also, for Hungary, Lithuania, Poland, Switzerland, Denmark, and Austria.

Business statements of corporations, even if they do a million-dollar business, are sometimes dry reading, but cooperators find the Year Book of the Central Cooperative Wholesale at Superior, Wis., full of human interest. Consumer societies affiliated with this wholesale distributed over $9,000,000 worth of goods in 1936 and netted in savings nearly half a million dollars. Net savings for all stores, 4.64 percent of sales, were the largest in their history. All stores together increased their volume of business in 1936, 21 percent over the previous year. Three years ago only 10 of the member societies rang up more than $100,000 of sales; now 27 achieve this level of business. One retail co-op exceeds a million dollars, and 9 did more than $200,000 in 1936. The Wholesale's own volume hit a record increase in the year of $660,000.

One-eighth of all farm supplies were purchased cooperatively last year through 4,472 cooperatives whose purchases were valued at $315,000,000, according to the Farm Credit Administration, which has prepared this map to show where this business is concentrated.


FARMERS' LARGE-SCALE PURCHASING ASSOCIATIONS
AMOUNT OF ANNUAL PURCHASING BUSINESS
Over 10 Million
From 5 to 10
" 2 " 5 "
" 1 " 2 "
" ½ " 1 "
Below ½ "
PURCHASING ASSOCIATIONS
PURCHASING & MARKETING ASSOCIATIONS

●

WHAT PRICE MILK?

[Concluded from page 14]

these laws work out, most consumers are strangely quiet about such legislation and its administration.

Confronted with a tangled problem, such as milk prices, consumers scratch their heads. They want milk. Many of them get no milk at all, and their bodies are testimonies to the damage that lack of milk can inflict. Others want more than they are getting now. They think maybe they could get more if milk cost less. But consumers want, too, a fair price paid to farmers, for they know that less than a fair price ultimately will mean not more, but less, milk.

First step to greater participation by consumers in the problems of milk producers is understanding how farmers are now paid for their milk. In a later issue of the Consumers' Guide we will explain the various current price schemes.

THE MAILBOX

Many of the questions which our readers shoot back at us are queries which others, besides the writers, would like answered. As far as possible we will share our replies to these consumer problems with all readers in this new department

“How is corned beef made and why is it so called?”

Corned beef is beef that has been cured for several weeks in a salt brine that may contain several other ingredients—such as sweetening and preservatives. The name, apparently, has nothing to do with our cereal corn, but comes from the former way of dry-preserving with salt grains, or “corns”, to use the Anglo-Saxon word. Though methods have changed, the old term “corned” continues.

Just as consumers can buy steaks and chops coming from different quality grades of beef—Prime, Choice, Good, Medium, etc.—so they can buy corned beef of various qualities, depending upon the price they are willing to pay. In the better grades the choicest cuts are usually reserved for eating fresh. In most markets, however, the demand for the lower-priced plates and rumps and briskets does not come up to the supply, so these parts are marketed largely as corned beef.

Once consumers have satisfied their taste for juicy sirloins smothered in onions, or steaming stews and hot dogs, the United States hasn't a large surplus of meat left over to be canned. In the Argentine things are different. The vast quantities of beef which are produced far exceed the home demand. So there is a large amount that is left for export, and is shipped as fresh and canned beef. The less choice carcasses consequently find their way to canneries to be converted into canned corned beef. That is why consumers may find Argentinian labels on the corned beef cans on grocery shelves.

“At what stage does veal become beef, and when does lamb turn into mutton? What is the difference between veal and 'baby' beef?”

To give a loose definition—veal is the meat of calves from 12 weeks to 1 year of age. Actually *immaturity* is the thing that determines when veal is veal, and that is something that can't be measured in terms of age, weight, or size. Different stages of development bring changes in flesh, and therein lies the distinction between veal and beef.

“Baby beef” is another phrase loosely used. It designates the meat of a young animal that has been force-fed and generally marketed around 12 to 18 months of age.

Maturity is the thing, likewise, that distinguishes mutton from lamb, a maturity shown in flesh and bone changes. Lamb carcasses usually have smaller, softer bones and light to dark pink flesh. They are under 1 year of age. Yearling mutton comes from animals about 12 to 24 months old. Color of flesh ranges from pink to light red. Mutton may be light to dark red in color and comes from mature sheep 2 years old or over.

“Last Christmas I bought a turkey at the local market, and when I came to draw the bird I found the meat bluish in color and the liver diseased. I destroyed the turkey and the market returned the money, but I wonder why the Government permits such products to be sold in the first place.”

No law requires processors of poultry products to have Federal inspection of their plants. It is true that the United States has a Meat Inspection Act—but its provisions do not apply to chickens or turkeys.

Some full-drawn chickens and turkeys sold in certain cities bear this mark—Inspected and Certified by Bureau of Agricultural Economics, United States Department of Agriculture. This mark means that a staff under the control of the Bureau of Agricultural Economics has rendered consumers the same service as regards their poultry that the Bureau of Animal Industry gives them where meat is concerned. There is this difference, however. Poultry processors must take voluntary action to procure this guarantee, and they must pay for it themselves.

That inspection of poultry is gradually growing is attested to by ordinances in New York, Chicago, Los Angeles, and various other cities requiring all drawn poultry shipped into their markets to be inspected.

The fact that the particular turkey in question was not drawn would indicate to the consumer that it had not gone through any inspection. Inspectors do not have X-ray eyes, so must draw every bird to find its condition.

An undrawn bird might be graded for quality, however, though in this process disease would not necessarily be discovered. The United States Government maintains this grading service, stamps the quality mark on boxes in which the turkeys are packed or upon a tag attached to each bird. Packers or groups of growers pay for this service.

Turkeys graded and tagged by the Government for the retail market are classified as Young or Old, Prime or Choice. Consumers who purchase a U. S. graded Prime turkey are pretty sure of getting a well-fleshed and well-fattened bird practically free from blemish. A Choice turkey is fairly well fleshed, but may show slight defects.

Ten States—Washington, Oregon, Idaho, Utah, Nevada, Montana, North Dakota, Wyoming, Colorado, and Nebraska supply the retail market with turkeys graded and tagged by the United States. Turkey growers in these States belong to a cooperative known as the Northwestern Turkey Growers Association. Members are required to have their turkeys graded if they want to share in co-op benefits. Many of these turkeys, of course, reach other markets for holiday trade.

Government grading service for poultry is available in large cities such as New York, Boston, Philadelphia, Chicago, Los Angeles, San Francisco, Seattle, Portland, Washington, and St. Louis.

Many States have State grades, too. Among these are Vermont, Connecticut, and Massachusetts. These are under rigid supervision of the various State departments of agriculture.

If consumers want their Thanksgiving and Christmas turkeys to come with a clean bill of health, it is up to them to make their voices heard in asking their merchants for inspection services.

"I HAVE heard a great deal about budgeting, but all budgeting books look like plain bookkeeping books. I do not understand bookkeeping and dislike anything to do with arithmetic. Is there any way to live by a budget without learning bookkeeping and spending hours over it?"

Here is a problem that is a real stickler. There is an "envelope system" of budgeting which certain social-service agencies have found useful in cases where homemakers have difficulty in writing. According to this method the homemaker decides about how much money will be needed for various classes of items—food, clothing, housing, etc.—and each week puts the required amount into the proper envelope. Then all payments for one purpose are made from one special envelope. However, this system has so many drawbacks that it can't be recommended generally. For one thing, it means keeping more money in the house than is required from day to day. Unless income is very small and comes in by the week, it is impractical. Besides, there is no way of telling what the year's expenses have been, unless slips bearing the amounts withdrawn are put in the various envelopes, and records of expenditures made from these at regular intervals.

Any way you look at it, good budgeting calls for some bookkeeping—though simplified methods are not as fearsome as consumers have been led to expect. After all, the records are not an end in themselves, but the basis for controlling current expenditures and planning so that a family may have the best possible living in its financial circumstances.

Valuable tips for simple budgeting can be found in various Government publications. Farmers Bulletin No. 1553, "Planning and Recording Family Expenditures", will help you make up your mind about the best type of records for your particular needs. The Farm Family Account Book, also published by the Department of Agriculture, is an actual ruled notebook for consumer use. Farmers Bulletin No. 1557, "Diets To Fit the Family Income", will help with food budgeting problems. All three are on sale by the Superintendent of Documents, Government Printing Office, Washington, D. C., the bulletins for 5 cents apiece and the account book for 15 cents.

PEARS APLENTY

[Continued from page 9]

the container and then cover with hot sirup and process them, or you can precook the pears in boiling medium sirup from 4 to 8 minutes, according to their size and firmness, and then pack them hot in the cans and process. Pears packed raw and covered with hot sirup will need 20 minutes of processing in the boiling water bath in No. 2 cans. In No. 3 cans they will need 25 minutes. If precooked, they call for 20 minutes of processing. Full instructions for home canning are included in the Department of Agriculture publication, "Home Canning of Fruits, Vegetables, and Meats", on sale for 5 cents by the Superintendent of Documents, Government Printing Office, Washington, D. C.

Crop forecasters predict that consumers can have all the pear salads and pear pies they want this year. The 1937 crop is to be the largest on record, they say, reaching the 30,400,000-bushel mark, as compared with the 27,000,000 bushels produced in 1936 and the 24,300,000 for the 5-year period 1928–32. Two-thirds of this bumper harvest will come from the Pacific Coast States of Washington, Oregon, and California. California will run far in the lead, with her 10,000,000 bushels. Michigan, with over 1,000,000 bushels, will head the list of pear-growing States east of the Rockies, followed by New York. Altogether, 42 States are represented in production estimates.

As a means of preventing markets from being glutted and prices from dropping to low levels, for the last 3 years fruit handlers in California have included pears in their fresh-fruit marketing agreement adopted under the Agricultural Adjustment Act. By this agreement, there could be: (1) Limitation of the shipment of any grade or size of fruit; (2) limitation of total shipments by periods within the marketing season; and (3) regulation of daily shipments by control from various concentration points.

With the same end in view—the maintenance of pear prices on an even keel—the Federal Surplus Commodities Corporation purchased surplus quantities of California Bartlett pears during July and August, these to be distributed to persons on relief rolls. This year, therefore, many needy persons will have their diets enlivened with a juicy healthful fruit. Funds for the pear-buying program are authorized by Section 32 of the amendments to the Agricultural Adjustment Act.

Our cover photograph and those on page 5 are by William M. Rittase, courtesy of "Fortune" magazine.

STUDY QUESTIONS FOR THIS ISSUE

1. What is meant by the statement that the Government is not a "blindfold buyer" of supplies?
2. Give one test used by the Bureau of Standards in judging toothpaste.
3. What is the difference between grain-split and flesh-split leather? Which is more durable?
4. How can consumers prolong the life of leather articles?
5. What points should consumers consider in buying gloves?
6. How are the costliest gloves cut? Can consumers tell if gloves are cut in this manner?
7. What percent of all farm supplies in the United States were purchased cooperatively last year?
8. What area comprises the "cow belt" in America?
9. Name three factors back of milk prices.
10. Why is competition keener among producers of butter than of milk?
11. Why would it be desirable to have sanitary requirements for milk uniform throughout the country?
12. Do city health regulations ordinarily apply to milk for cream and butter?
13. Explain the way in which milk-producer cooperatives affect the price of milk.
14. What pear is most widely grown in the United States?
15. Consumers should look for what qualities in pears to be purchased?
16. What has been done recently to keep pear prices on an even keel?
17. Do any of the canned pears stocked by your grocer carry quality grades?
18. What is corned beef? Does it come from different quality grades of beef?
19. What is the difference between mutton and lamb?
20. Are processors of poultry products required by law to have Federal inspection of their plants?

OUR POINT OF VIEW

The CONSUMERS' GUIDE believes that consumption is the end and purpose of production

To that end the Consumers' Guide emphasizes the consumer's right to full and correct information on prices, quality of commodities, and on costs and efficiency of distribution. It aims to aid consumers in making wise and economical purchases by reporting changes in prices and costs of food and farm commodities. It relates these changes to developments in the agricultural and general programs of national recovery. It reports on cooperative efforts which are being made by individuals and groups of consumers to obtain the greatest possible value for their expenditures.

The producer of raw materials—the farmer—is dependent upon the consuming power of the people. Likewise, the consumer depends upon the sustained producing power of agriculture. The common interests of consumers and of agriculture far outweigh diversity of interests.

While the Consumers' Guide makes public official data of the Departments of Agriculture, Labor, and Commerce, the point of view expressed in its pages does not necessarily reflect official policy but is a presentation of governmental and nongovernmental measures looking toward the advancement of consumers' interests.

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Facts about hides and skins to help you get your money's worth in leather goods and gloves.

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Largest crop on record is the experts' forecast for this succulent fruit, now rushing to consumer markets.

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Back of city milk plants are hundreds of thousands of dairy farmers whose living depends on fair prices for their product. In this third of our series on "Milk for Millions" we dig at the roots of their problem.

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VOLUME IV, NUMBER 13 SEPTEMBER 20, 1937

YOUR MONEY'S WORTH IN SHOES

CONSUMERS' Guide

Issued every two weeks by the Consumers' Counsel, Agricultural Adjustment Administration, Department of Agriculture, Washington, D. C.

Vol. IV, No. 13 Sept. 20, 1937

If there are any smarter consumers than a group we know about out in Washakie County, Wyo., we'd like to know about them. To the naked eye there is nothing extraordinary about these consumers. They are people, like many others with small incomes, who some months back were getting pretty frazzled over the daily problem of making limited food budgets cover the job of feeding husky, growing boys and girls adequate, nutritious, and satisfying meals. What is unique about them is the way they went about getting help on this problem.

A few of these baffled homemakers went for help to their county Home Demonstration Agent, one of some 1,200 such agents in the country whose job it is to counsel the families in their districts on the many jobs connected with managing the business of homemaking efficiently and economically. This particular Home Demonstration Agent was wise in the ways of planning and preparing wholesome diets. "Tell us", these consumers asked, "how we can lick this diet-budget ogre."

Together they worked out a plan. They decided to put on a 30-day food-buying experiment. The Home Demonstration Agent would give the group the general pattern of an adequate diet, suggest the types of foods and the amounts that would give each family the nourishment it needed, and advise with the group on how to apply these rules to their individual problems. Each experimenter would keep a careful record of foods purchased, expenditures, and the meals actually served. Furthermore, they would all gather once a week to compare notes and exchange ideas. For fun, and because they knew others would benefit by being in on this experiment, they decided to make it a community project with membership open to any interested homemaker.

News of the proposed experiment spread like wildfire. Telephones buzzed. Stories appeared in the local newspapers. It was a relatively small community, but when the experiment got down to business there were 45 homemakers eager to embark on this novel undertaking.

All of the 45 enthusiastic consumers at the first meeting agreed to plan menus and keep careful food accounts over the 30-day period in order to determine accurately in actual dollars and cents any savings they achieved in their food expenditures. Then they examined the diet plans which the United States Department of Agriculture has worked out for families of all sizes and ages and types (any consumer can buy for 5 cents "Diets to Fit the Family Income" from the Superintendent of Documents, Washington, D. C.). Conveniently, these diets are worked out to provide the best possible nutrition at four levels of cost. The bottom-cost diet is an emergency one, not good enough as a regular day-in-and-day-out bill of fare but adequate for short periods. Diets at the three levels above this are good year-round food programs costing minimum, moderate, and liberal amounts. To start, these 45 experimenters decided to plan their meals to the minimum cost level. By following this pattern, worked out by scientists, they could protect the health of their families with an adequate amount of vitamins and minerals in the amounts needed by an active father, growing boys and girls, and a busy mother, or whoever had to be fed. How to make the meals beguile and please the appetites of their families was up to each homemaker, but part of the fun of the experiment was swapping ideas on this important part of meal planning.

Five meetings were held to keep the enterprise a group undertaking and to get pointers that would make for the success of each cooperating consumer. At the first they discussed the "Mechanics of Menu Planning"; at the others "Thrift Ideas", "Child Feeding", "Hurry-up Meals", and "Consumer Buying." Actual menus planned by the members were studied in order to give each planner practice in judging her success in achieving an adequate diet at the desired cost.

After a week's trial of the minimum-cost diet by all the group, some of the experimenters decided that this diet level was too severe, and since they could afford a little more leeway in expenditures, they changed to the moderate-cost diet plan. All of the group were thrifty, ambitious homemakers, but none was financially forced to stay on the lower-cost diet. Some families were quite satisfied with this diet because, while meals were simpler than formerly, yet careful planning had made the food much more satisfying.

Thrift ideas were contributed by each member of the group. Five-minute demonstrations were given by two homemakers on pet thrift plans. Discussion led to the conclusion by the group that five ways to trim edges on food expenditures are: Plan menus at least a week in advance; market carefully a week ahead of time; take advantage of "specials"; buy with the idea of "getting the most for your money"; keep an emergency shelf to supplement meals in emergencies.

The group learned more about the importance of food habits for children of pre-school age. Selection,

[Continued on page 18]

YOUR MONEY'S WORTH IN SHOES

Shoe values come to those who know materials and workmanship that make for wear

When fashion decrees that skins of sharks, alligators, snakes, or kangaroos will be the smart new footwear for the coming season, fishermen sharpen their harpoons, hunters polish their guns, make their traps, and travel ocean, jungle, and desert to bring in the coveted skins. But most of the shoes worn by men, women, and children in the United States are made from the hides and skins of domestic animals. In 1935 the value of the products of the boot and shoe industry other than those made of rubber was $643,872,000. To make these millions of dollars worth of shoes as well as other leather commodities, American tanners import hides and skins from many countries besides buying those available through American packers and farmers.

Cattle, calves, goats, and sheep are raised primarily for food. Their hides and skins are largely a byproduct of the meat industry. Though the packer takes into consideration the value of the hide and skin in the price he pays to the farmer for his livestock, there is no direct and consistent relationship between the amount of money the farmer gets for his animals and the amount the packer gets for the hides and skins which he sells to the tanner. Likewise there is no close correlation between the price of leather and the price of shoes. The cost of manufacturing and general economic conditions dictate the price consumers pay for shoes.

Money that goes for shoes cuts a disturbingly large hole in many family budgets. Even if the style of the shoe appeals and "it fits like a glove", there are many questions which consumers with a slim purse would like to have answered. Will the particular shoes he has selected give him good wear? Will they hold their shape? Will the leather be free from cracks and tears?

Experts cannot judge the wearing quality of shoes by a glance. They often find it necessary to break a shoe down, to cut a sample of leather from each of its parts, and to study the shoe's construction. The National Bureau of Standards, in response to an appeal from the General Federation of Women's Clubs to assist in establishing standards for women's leather shoes, is at present carrying on an experiment to test the durability of shoes of different construction. Results of their study are not yet published.

Few shoes have informative labels to tell the consumer what kind of service he may expect from them. Yet shoes designed for the same type of service vary greatly in price. The cost of a pair of shoes depends largely on the quality of leather and the technique used in making them. High-priced shoes usually have more hand work and stay longer on the last acquiring their shape. Cheap shoes are made with every possible economy in time, labor, and materials. The wearing value of medium-priced shoes is the most difficult to judge, as there is more vari-

Take care of the soles and heels, for they do the brunt of the work of shoes.

Soles cut from the "bend" of the hide wear twice as long as those from the belly.

Run-down heels quickly twist a shoe out of shape, are costly in shoe wear.

ation in the quality of materials used and in the workmanship. Test by experience is, to date, the only guide consumers have, but knowledge of the types of leathers and of the construction methods used in making shoes can help one in cutting the risks of unwise selection.

If you are interested in the life of your shoes, take care of their soles and heels. They do the brunt of the shoes' work and are the quickest to wear out. Leather soles are made from heavy cattle hides which have been either vegetable- or chrome-tanned. The portion of the hide from which the soles have been cut and the method of tanning influence the wearing quality of the leather. Soles cut from the "bend" of the hide—the section which originally covered the animal from shoulder to tail and from the backbone to the upper edge of the belly—are the staunchest and wear about twice as long as those cut from the belly, and one and one-half times as long as those from the shoulder. Leather from the bend is close-fibered and firm, while that from the belly is flabby and soft.

Process of tanning used on the hide also affects the life of a sole. Vegetable-tanned leather is used for most soles. Natural color of vegetable-tanned leather ranges from shades of tan to reddish brown. Most leather used in the upper part of the shoes and some used for soles is chrome-tanned. (For description of tanning process, see CONSUMERS' GUIDE, Sept. 6, 1937.) Longest wearing soles are those made from unwaxed chrome leather which is light bluish in color. But though unwaxed chrome leather rates high for durability, it absorbs moisture so readily that it is practical for only very dry climates or indoor use as in gymnasiums. However, chrome leather, when filled with greases to make it more waterproof, still wears longer than vegetable-tanned leather. Brand-new waxed chrome soles are often stiff at first, but after they are worn a few times the stiffness disappears.

Rubber and composite materials are being used more and more for heels of shoes. Wood is a common material used for high-heeled dancing slippers and other lightweight footwear as it is not as heavy as leather. But as it is not as resilient as leather or as springy as rubber, a leather or rubber lift is often put on a wooden heel. If you wish to preserve the life of your shoes, take care of their heels. Run-down heels quickly twist a shoe out of shape.

Consumers usually have more of "an eye" for uppers than for soles of shoes, yet the naked eye can seldom spot wearing quality here either. Trade names often give little indication of the type of leather used in the shoe. Grain, nature, color of the finish of the leather are often described in the trade name, while the original source of the leather, the name of the animal from which it came, is lacking or the name of another animal borrowed. "Elk" is a trade name used for side leather made from cattle hides which have been tanned and finished in a certain way, while true elk skin is sold under the trade name of buckskin. Patent leather shoes may mean shoes made from side leather, horse, colt, goat, kid, or calf.

Side leather—so-called from the practice of splitting hides into halves or sides before tanning—is widely used in shoes of every type from the hiking boot to the dancing pump. Its relatively low cost and durability as well as the ease with which it takes many finishes makes it a standby material. Side leather is usually split into two or more layers for shoe uppers. The first layer, called the grain split, is the hair side of the hide. It gives better wear than flesh splits, made from the under side of a hide. Fine lines and hair holes on

Grain leather gives better wear than "flesh splits" from the same hide.

Side leather from cattle hides makes durable shoes for rough or hard wear.

Calfskin shoes give good general service fo city street wear.

Sheepskin ("kid") in bargain shoes is stretchy, loses shape quickly, scuffs easily.

Best suede has a fine silk nap, a rich, uniform color, and no greasiness.

In patent leather of good quality, the grain should show through the varnishes.

Insoles of close-textured flexible leather wear better than fabricated materials.

Cost of resoling depends largely on how soles were attached to uppers. Welted shoes are easily repaired.

grain leather make a design similar to that on the back of the human hand. This design is lacking on flesh splits, unless it is artificially stamped on.

Often a grain pattern peculiar to the hide of one animal is embossed on that of another or on a flesh split, making it difficult to tell whether it is a true grain or not. Cattle hides, as well as other heavy hides, are sometimes split to the thickness of lighter-weight calfskin, embossed with the natural grain of calfskin and sold as calfskin. Genuine calfskin is seldom split.

Calfskin is considered a strong leather. Its flexibility makes it a desirable choice for general service. Calf leather, like side leather, is finished in a variety of ways. It may be treated with a smooth, boarded, embossed, or glazed finish. Dull calf leather is leather that has been heavily waxed on the flesh side. Buffed leather, which has less nap than suede, is finished on the grain side, part of the grain surface being taken off with an emery wheel.

Most of our suede footwear is made of calf finished on the flesh side, but suede shoes may be shoes made of many different leathers. Thus sheepskin takes a suede finish and at first glance may seem to look like calf suede. The best suede has a fine, silky nap, with no indication of greasiness. It has a rich, uniform color which does not rub off easily. One can rub a handkerchief lightly over the surface of good suede and only a faint color will show on the white cloth.

Coatings of special varnishes or enamels turn calf, side leather, and other leathers into shiny patent leather shoes. Patent finish is usually applied on the grain side. In patent leather of good quality the grain will show through the varnishes. The attractive appearance of patent leather often makes it first choice for dress shoes. Feet shod in patent leather often get hot because of its airtight and watertight varnishes.

Leathers made from hides of different animals have distinct characteristics and vary in the durability and the type of service the consumer may expect from them. Cordovan leather, one of the most expensive materials used in men's shoes, is made from the rump of a horsehide. It is a scuff-resistant, long-wearing leather, but its close texture does not make it desirable for every foot. Many people need a more porous leather to allow their feet to breathe. Shoes made of kangaroo leather are usually costly shoes. It is the strongest leather known for its given weight and thickness and gives excellent service, as it does not readily scuff, chip, or crack. Shark leather is a recent addition to the materials used in shoe uppers. Though no leather can be called "scuff-proof", shark leather will stand much punishment before showing wear. A relatively expensive leather, it is seldom used for an entire upper, but for toe caps, especially for children's shoes, it is an excellent choice. All leathers will scuff to some extent, some more easily than others. The finish given to a leather also influences its resistance to scuff. When toes and heels do peel or scar, attention should be paid to them. The loose strand of leather should be clipped off and the scar polished.

Genuine kid leather is not used for shoes. Kid shoes, often the first choice for street wear and for dancing, are really made from skins of goats. These skins finish well in many different colors, are soft, pliable, and porous—characteristics prized in a summer shoe. For winter street wear, kid usually gives way to other leathers which are warmer and more waterproof. Best grades of kid leather are expensive. Bargain sales in kid shoes usually mean shoes made of sheepskin. Sheepskin is soft like kid, but it is very stretchy, is inclined to lose its shape quickly, to scuff easily, and to peel at the toes. Sheepskin comes into its own when used as the lining for shoes.

Leather, paper, and cloth are used to line shoes. Leather, especially for the back half or quarter of the shoe lining, is more satisfactory, as it tends to keep the shape of the shoe and makes a smooth, comfortable inner surface. Insoles of close-textured flexible leather are more comfortable and help to keep the shape of the shoe better than those made out of fabricated material. If you are curious about your insoles you will have to lift a corner of the lining of the shoe in order to examine them.

Counters, or back-stays of shoes, are easier to inspect. Stitched to the inside of the shoe at the back seam, they both reinforce the seam and help to retain the shape of the shoe. These stiffeners are made of many grades of leather and fiber. Though solid leather which has been beaten to conform to the last of the shoe is first choice for a counter, a fine-quality material such as those made from hemp or flax or fiberboard is preferable to one made out of cheap leather which has been stiffened with glue. On cheap shoes especially it is important that the counters have "stand-up" qualities.

Construction of a shoe depends to some extent on the service for which it is designed and the price for which it is to be sold. Consumers who are hard on shoes and are constantly taking them to the repair shop will do well to study the construction of shoes when they buy them. Cost and ease with which new soles can be exchanged for old depend largely on how the soles were first attached to the uppers.

"Welted" and "McKay" are two of the most common types of construction. Over two-thirds of the men's shoes and many of the women's sport shoes are welted. It is easy to spot a welted shoe, as the welt, resting on the projecting part of the outsole, usually extends a quarter of an inch or so beyond the line where it joins the upper. In building the shoe, one edge of the welt, which is merely a narrow strip of leather, is first sewed to the upper and insole of the shoe and the other edge is then sewed to the outsole. The inside of the shoe is free from tacks and stitches. Welted shoes are easily repaired—especially if the narrow strip of leather making the welt is of good quality.

McKay-constructed shoes can be repaired but not so easily as welted shoes. The McKay technique is used for lighter-weight and for inexpensive shoes. Outsole, upper, and insole are stitched together, with the stitch going through to the inside of the shoe. The stitches are then covered with a sock lining.

Stitchdown technique is commonly used for children's shoes. Like the welted shoe, it has no stitches on the inside of the shoe. The edge of the upper part of the shoe is turned out and is stitched directly down to the outsole of the shoe.

Turned soles are found on dainty, costly footwear. Very flexible soles are used and are sewn either by hand or machine to the uppers, and then the shoe is turned right side out. It is difficult to repair turned shoes. New soles usually must be nailed or cemented on the shoes. Technique of cementing the upper and outsole together was formerly used only on cheap shoes, but the method is now being used on higher-grade shoes, especially for women's sandals and cut-out shoes. Modern cemented shoes, if correctly made, have a trimness and lightness of appearance. Nailing and pegging the uppers and soles together are methods used in many cheap grades of shoes and in men's work shoes.

The old saying, "as comfortable as an old shoe", does not necessarily hold true. Well-fitting shoes should be comfortable when new and should not require a long painful breaking-in process.

Shoes of the best quality leather and the finest workmanship quickly lose their shape and give poor service if they are not a good fit. In buying shoes, don't rely on the size marked on an old pair of shoes. Sizes of different makes of shoes are not uniform. Manufacturers are continually changing their lasts—the form over which the shoe is constructed. Insist that the shoe clerk measure your foot when you are both in a relaxed and standing position.

It is more important for shoes to suit your foot rather than your vanity. Women especially are inclined to place style before comfort in buying shoes. In a survey taken of the footwear being worn by a thousand people at the Wisconsin State Fair in 1925, 40 percent of the men and only 14 percent of the women were wearing well-fitted shoes. Forty-five percent of the boys and 32 percent of the girls had been correctly fitted.

People gamble with health when they try to jam their feet into shoes which give no breathing space to their toes. The shape of the shoe should conform to the shape of the foot. To enable the 26 delicate bones of the foot to lie almost straight, the inner line of the shoe needs to follow the fairly straight line of the foot. The position of the ball of the foot, which distributes the weight and support to the body, should rest at the widest part of the sole, and the shoe should fit snugly under the arch.

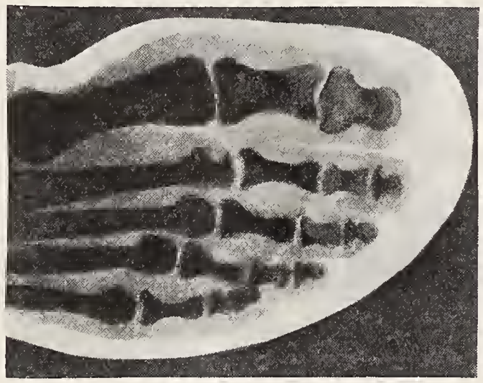
Today the fluoroscopic machine has an honored place in many shoe stores. By means of the X-ray the foot can be clearly seen inside the shoe. Testing the fit of children's shoes by fluoroscope is especially desirable. A young foot can so easily be compressed in a shoe that is too short or narrow without the child realizing it. Children's feet grow so rapidly that it is better to risk fitting them in shoes that are a little large rather than too short. But adults, whose feet are fully grown, should be careful to get shoes that are neither too small nor too large. Callouses and a "burning sensation" are often the result of wearing shoes that are too big.

Relation between well-fitted shoes and one's general well-being can hardly be overemphasized. Bad posture usually followed by physical disturbances is often traced to ill-fitting or incorrectly made shoes. There is no economy in wearing out a pair of uncomfortable shoes. Foot troubles which may take years to correct are often the result. Consumers suffering from foot ailments should consult a doctor before experimenting with corrective shoes. Though it is claimed that some foot ills can be cured by orthopedic shoes, the main purpose of footwear is to protect the feet, not to cure foot troubles. Wise consumers seriously question the truth of an advertisement which claims otherwise. Recently the Federal Trade Commission has prohibited the use of a doctor's name in advertising a shoe when no doctor is connected with the business. In many States there are laws making it illegal for anyone except licensed medical men and foot specialists to prescribe specific shoes as a cure for foot ailments.

Twenty years ago the consumer determined to wear correctly made shoes was compelled to sacrifice style for the sake of health. Today this is no longer a real problem. Manufacturers and educational institutions have tackled this problem. Since 1924 Antioch College, for one, has carried on an extensive piece of research, studying the relationship of health and body mechanics to various types of footwear. Many manufacturers are making shoes that are generally satisfactory from both physiological and aesthetic points of view.

Shoes should be comfortable when new, and not require a painful breaking-in process.

Before you buy, have your foot measured in both a relaxed and standing position.



Let shoe shape follow foot shape, and always allow breathing space for toes.

X-ray machines help you see whether the shoe provides ample space for your foot.

One way of getting good value from money spent for footwear is to exercise judgment on when and where you wear your shoes. High-heeled, thin-soled, delicate leather pumps are not constructed for long tramps on country roads or city pavements.

Footwear requires some consideration, if it is to give long service. Perspiration is hard on leather. If possible, it is best to have at least two pairs of shoes for general wear so that you can give one pair a rest.

Polishing or oiling leather tends to keep it soft and pliable and to make it more resistant to water. Wet leather stretches quickly out of shape. Keep damp shoes away from hot radiators, steam pipes, or stoves. Always allow wet leather to dry slowly.

Oil and grease make ugly stains on leather and should be removed as quickly as possible. Gasoline and other ordinary grease solvents often spread the spot rather than remove it. Best method is to coat the stain with a thick solution of rubber in a solvent which evaporates quickly. The rubber makes a coating on the shoe which should be peeled off when almost dry. If necessary the operation should be repeated a couple of times. Some of the ready-prepared cements, if they are thick and dry very fast and contain nothing but rubber and pure solvent, are very satisfactory.

For further information on leather shoes write to the Superintendent of Documents, Washington, D. C., for Farmers' Bulletin No. 1523, "Leather Shoes: Selection and Care." Price, 5 cents.

Know Your Fabric

Not only consumers but producers, too, stand to gain from more informative and accurate labeling of fabrics. Here are some notes on recent developments in the movement for better labeling

SILK, linen, cotton, and wool—these four fibers over many centuries made up our fabrics. It was hard enough for consumers to tell these materials apart, much less know how to care for them properly, but comparatively recently a new fiber appeared on the scene to complicate consumer problems still further. This is a synthetic product, rayon, its name covering several types of material differing from each other in composition. These rayon materials call for differing types of treatment, too, as many consumers have found to their sorrow. Yet they resemble each other so closely that they cannot be told apart by many consumers. In fact, it would take a laboratory test to distinguish some rayons from natural fiber materials. The consequent confusion, resulting in complaints from consumers and losses to retail shops, has centered attention on the necessity for clear textile-fiber identification.

No consumer problem has received more attention in the last few months than has textile-fiber identification. Consumer groups, commercial agencies, the Federal Trade Commission, and the Congress of the United States have been giving this problem careful consideration. The purpose of this article is to focus our news spotlight on some happenings on the fiber identification front.

In June the American Home Economics Association, long a champion of truthful fiber identification and informative labeling, resolved at its Kansas City convention: "Whereas various agencies are engaged in efforts to secure identification of fibers in fabrics, be it therefore resolved, that the American Home Economics Association endorse this movement and that its members lend their assistance in every way possible, and be it further resolved, that this resolution be sent to the Federal Trade Commission."

However, the genesis of the immediate campaign activity in this field goes back to January 1936. Adopting the slogan, "The Women Want to Know", the New York Federation of Women's Clubs, with over 40,000 women members in 240 metropolitan clubs, decided that the time had come for direct action. They asked their members to request sales clerks to write the fiber content on sales checks for every fabric material purchased. These checks were then to be forwarded to the Federal Trade Commission as evidence of the consumers' interest in this problem.

General trend of the Federal Trade Commission's reply was that where there is actual misrepresentation the Commission can issue a cease and desist order. The Commission, however, does not have power to compel the seller to label his merchandise or to put facts on his labels.

Procedure in a Federal Trade Commission case involving misrepresentation, mislabeling, or misbranding may follow one of two lines. Any individual, or a competitor, may lodge a complaint with the Commission, or the Commission may initiate a proceeding on its own responsibility. After a preliminary investigation by attorneys the facts are laid before the Commission, which may decide to issue a complaint or permit offenders, in mild cases, to sign a stipulation to cease and desist from the unlawful practices of which complaint has been made. If they refuse to sign the stipulation, the Commission then resorts to its complaint procedure.

A "complaint" issued by the Federal Trade Commission is the statement of charges against the respondent. The accused may file an answer to these charges and present evidence before a trial examiner, who in turn reports his "findings of fact" to the Commission. The case may be argued before the full Commission, with attorneys for the respondent and for the Commission presenting briefs and oral arguments to support their contentions. The Commission then issues an order to cease and desist or dismisses the case.

No penalty applies to offenders, whether they stipulate that they will cease and desist or are ordered to do so by the Commission after formal proceedings. Only in the event the Commission's order has been taken to court and there upheld is the offender subject to penalties. As in baseball, three strikes make an out. First misrepresentation, when detected, brings action from the Commission—strike one. Second offense, violating the Commission's order, may result in a court order similar to that of the Commission—strike two. Third offense, violating the order of the court, brings a penalty for contempt—strike three and out. However, there is this exception. When the Commission's first action is by stipulation, no strike is called for that offense as the Commission must revert to its complaint procedure before an order can be issued and the matter taken to court.

Since March of this year the Federal Trade Commission has settled 19 fabric identification cases by stipulation. Of these, 7 involved only misbranding, while 12 involved both misbranding and false and misleading advertising. These 19 cases fall into two general categories.

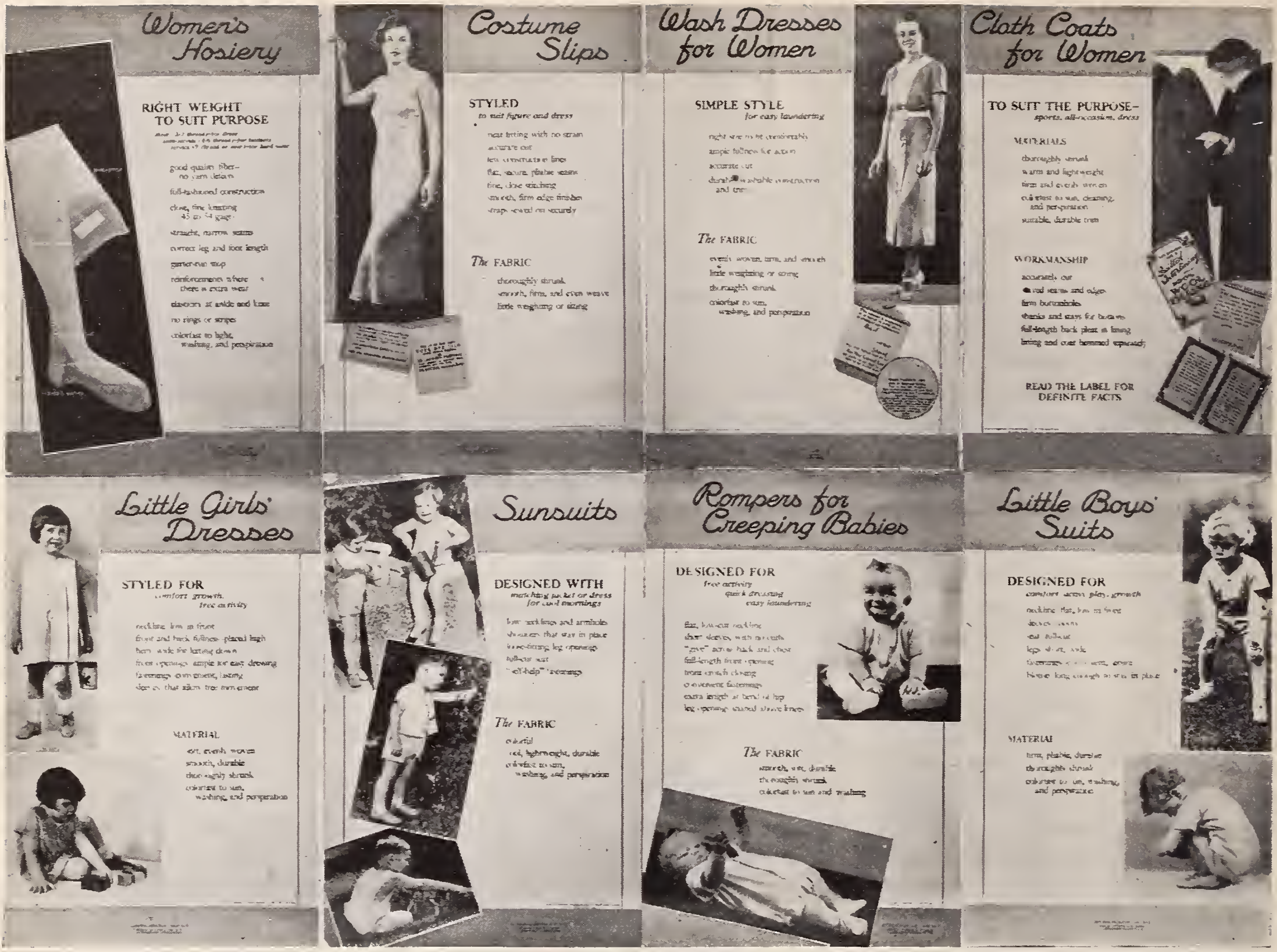
One type of case is concerned with the use of fabric names such as crepe, taffeta, and satin which consumers had been accustomed to identifying with silk fabrics in the pre-rayon days. The question is this: Shall the rayon industry be forced to coin new fabric terms or may it use such qualified phrases as "rayon crepe", and others of like nature?

There is a second type of case where special fabric names are not involved. Here claims are made that fabrics are silk, whereas tests show that they are not. All of the cases in this category which have come before the Commission since March involved both misbranding and false and misleading advertising. Some cases involved textile fiber used in hosiery as well as dress materials.

The Federal Trade Commission now has on its docket seven complaints involving fabric identification. Five of these are against large New York department stores, one against a hosiery manufacturer, and another against a distributor of piece goods. Stipulations are generally not more than a page in length, but the complaints, which are the statements of the charges against the respondent, often run to three or four pages in length.

Let us take a look at one of these complaints to see how they are made up. Paragraph 1 gives information as to the name and address of the firm, the type of business it conducts, and states that it is engaged in interstate commerce. Paragraph 2 certifies that the firm is in substantial competition with other corporations. Paragraph 3 specifies the facts of the case which represent misbranding or false and misleading advertising. For example, one of the complaints at hand reproduced the following advertisement for a dress: "Smart New Yorkers Have Gone Wild About It. (Name of magazine) and (name of magazine) both stress this new sculptural quality. The Grecian moulded lines that show every curve of the figure beneath. And it is unquestionably one of the most important fashion trends in seasons. Noteworthy, too, because it's in supple black silk jersey—favored fabric of the great (name of designer). You can't do better than to adopt this dress at once. In sizes 10 to 18." Paragraph 4 states that the representation made about the type of fiber used in the fabric in the above advertisement is not true, that the fabric in this case was not composed of silk. Paragraph 5 states: "The said representations and practices as described hereinbefore have the capacity and tendency to, and do, mislead and deceive the purchasing public into the erroneous belief that the dresses manufactured by respondent and described by it as herein set forth are manufactured of silk. . . ." Paragraph 6 then states that the above acts "were and are, each and all, to the prejudice of the public and of respondent's competitors, and constitute unfair methods of competition in interstate commerce. . . ." The final paragraph of the complaint sets forth the time when a hearing shall be held before the Federal Trade Commission. It also states that if the respondent corporation desires to protest the proceeding, the respondent shall within 20 days file an answer to the complaint. Most of the seven fiber identification complaints now before the Federal Trade Commission are to have a hearing within the next few months.

Persistent interest in fiber identification on the part of consumers has stimulated activity on the part of commercial firms. At the mid-year convention (June 1937) of the National Retail Dry Goods Association the publicity director of a large New York City department store made an unusually frank statement



Charts prepared by the Bureau of Home Economics help puzzled consumers to know what quality points to look for when buying garments.*

with special reference to fiber identification: "Last week and yesterday stores sold tens of thousands of dollars of merchandise that today is being returned to them. These are returns that canceled sales we thought we made yesterday, and sales we thought we had last week, returns of goods that cost us money to advertise, to sell, to deliver, and to call for again; returns that increase mark downs; returns from disgruntled customers; returns that have undermined the confidence of some of our customers; costly returns, caused for the most part by the fact that the customers discovered something about the merchandise when they got it home that they did not know when they bought it.

"Now, did we do everything within our power to inform these customers properly about the merits—and the limitations—of the goods at the time we sold them? You know the answer—it's NO!

"Did we, as merchants—and when I say we, I mean our sales people, our buyers, our merchandise men, the head of the house, and in many cases even the manufacturer—did we know the merits and the limitations of the goods so that we could have informed these customers at the time we sold the goods? You know the answer to that one, too—it's definitely NO!"

What this store is doing to put an end to this situation was described in the CONSUMERS' GUIDE, Volume IV, Number 9, page 2. Briefly stated the plans call for getting the facts from the manufacturer and seeing that this information carries through to the ultimate consumer on the label and in advertising copy.

The following notice came last month from another large New York department store: "Notice: Important and effective immediately ——— & Co. will identify the fiber content of all merchandise. It

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**Set of nine Clothing Selection Charts on sale for 40 cents by the Superintendent of Documents, Government Printing Office, Washington, D. C. Actual size, 20 x 30 inches each.*

is therefore necessary for all manufacturers to cooperate by indicating precisely the correct fiber or fiber combination and weave for each style of merchandise on invoice." A New York newspaper in reporting the above action says that other stores are taking similar action.

The president of a large commercial firm, which licenses its special treatment of fabrics to 3,900 processors who in turn apply it to 1 billion yards of fabric, has just announced: "Each piece of goods handled by our company in the future will carry a fabric identification tag that will tell clearly and concisely all who wish to know what percentage of wool, silk, or rayon is involved in a contemplated purchase. The tag will carry through to the cutter-up, the retailer, and the consumer." The label statements are to be policed by central testing laboratories located in New York and operated under the supervision of a large commercial testing laboratory.

Last April a merchandise counselor writing in a monthly magazine of national circulation said: "The buyers of this country are hungry for products, stores, services, men they can trust. They want not just cheap things, but good cheap things; not just glamour, but honest worth beneath it. They want advertising to be a man's written word of honor." A month later this magazine reported: "Consumers near and far were prompt to applaud her (the author's) downright appeal for fair and recognizable identification of fiber, particularly rayon. Requests for permission to reprint the article came pouring in; to date upwards of 100,000 copies of the article, or extracts from it, have been distributed among trade executives and interested laymen. . . ."

"Truth in fabrics" legislation has been introduced in Congress for a good many years, and the present interest in fabric identification has produced more than the usual number of bills on the subject this past session. Three bills were introduced in the House of Representatives and one in the Senate.

Response of the trade to the movement for fiber identification and for informative labeling has been varied. Speaking broadly of the whole question of informative labeling one trade publication reported in August that on interviewing a group of Kansas City retailers they "found out from them that there'd been practically no local consumer demand for labeling, that what's more, retailers didn't intend to be drawn into a course of labeling and promotion for which their trade did not obviously call, and which might indeed tend to confuse (the customer) unnecessarily. . . ." On the other hand a retail manager in summing up his views says, "Fiber identification may not be in itself nearly as important as some of the other facts about merchandise, but fiber identification is and must be the basis on which these and other contributions depend. . . ."

Eight months ago another store executive wrote in a trade paper: "We are not the offenders. We are reliable merchants. Our customers can judge the durability and quality of goods by its price." An advertising manager is quoted as saying that "women are able to learn all they really want to know about fabrics at the present time. . . . Tags labeled silk or wool would really offer very little enlightenment to the average shopper."

Perhaps "truth in fabrics" is only the first step in aiding buyers of clothes and household necessities. Performance specifications may be the thing that consumers really want. In contrast to the above quotations is the statement of the case in favor of informative labeling made in the same trade publication 4 months ago which devoted a 48-page special section to the subject, "The Consumer Wants to Know." "Speak the language of facts", said a half dozen leaders of women's organizations in the opening article.

In answer we find the Chairman of the Merchandising Division of the National Retail Dry Goods Association saying: "We can, in staple and some semi-staple goods, develop standards of manufacture, examination, and grading—standards which should be equally acceptable to manufacturers, retailers, and consumers alike—standards which may be clearly indicated to our customers through advertising and through labels supplied by the manufacturer—standards which will enable the purchaser of staple goods to better judge quality and durability." Another article reports on replies to a questionnaire sent to 100 store executives scattered throughout the country which indicated that 97 percent favored the present move to request manufacturers to put a correct description of the fabric on all the materials bought. "Fact tags will mend the weak link in the selling chain—both consumer and salesperson need more information at the point of sale", is the caption of another article by the advertising manager of a Midwestern department store. Summing up, this magazine states: "This movement is no passing fad because it has been slow in maturity, and having learned to walk, is now ready to run."

In studying this problem consumers need to keep in mind that groups other than themselves have a financial stake in its solution. Producers of the raw materials stand to gain a steadier market for their products when demand for them is based on intelligent selection. Others between original producer and final consumer have a stake in telling the truth about fiber or concealing it, depending on the theory of business success upon which they operate.

OUT OF THE LOCKER

Here is a record of how cold-storage locker plants help some consumers to get better food at lower cost

Strawberries in November and fresh asparagus at Christmas sound like luxuries to most of us, but a small army of consumers now serves such out-of-season foods as a matter of course. Thanks to the cold-storage locker plants that have been springing up over the country, these consumers can go to their refrigerated lockers in the winter months. There they take out the chickens or berries that they bought at lower prices during hot weather and cannily stowed away against times when prices would be high. They remove their produce in much the same way that they would take the family silver out of the safety deposit vault—and with considerably less trouble.

Briefly, the new locker system amounts to this: Private concerns or cooperative enterprises rent out refrigerated locker space to individuals for the storing of meat, eggs, fruit, etc. Such produce the clients can remove at any time they wish. Though a city trade is steadily growing, most clients are still farmers who have home-killed meat to take care of. For their convenience many of the plants have turned to slaughtering, sausage-making, curing, and pickling as sidelines. In fact, they have turned themselves into "pocket-size packing plants" with the butcher hired by the concern as a person of importance. Often this custom butcher slaughters the livestock on the farm, then brings it to the processing room where he cares for it.

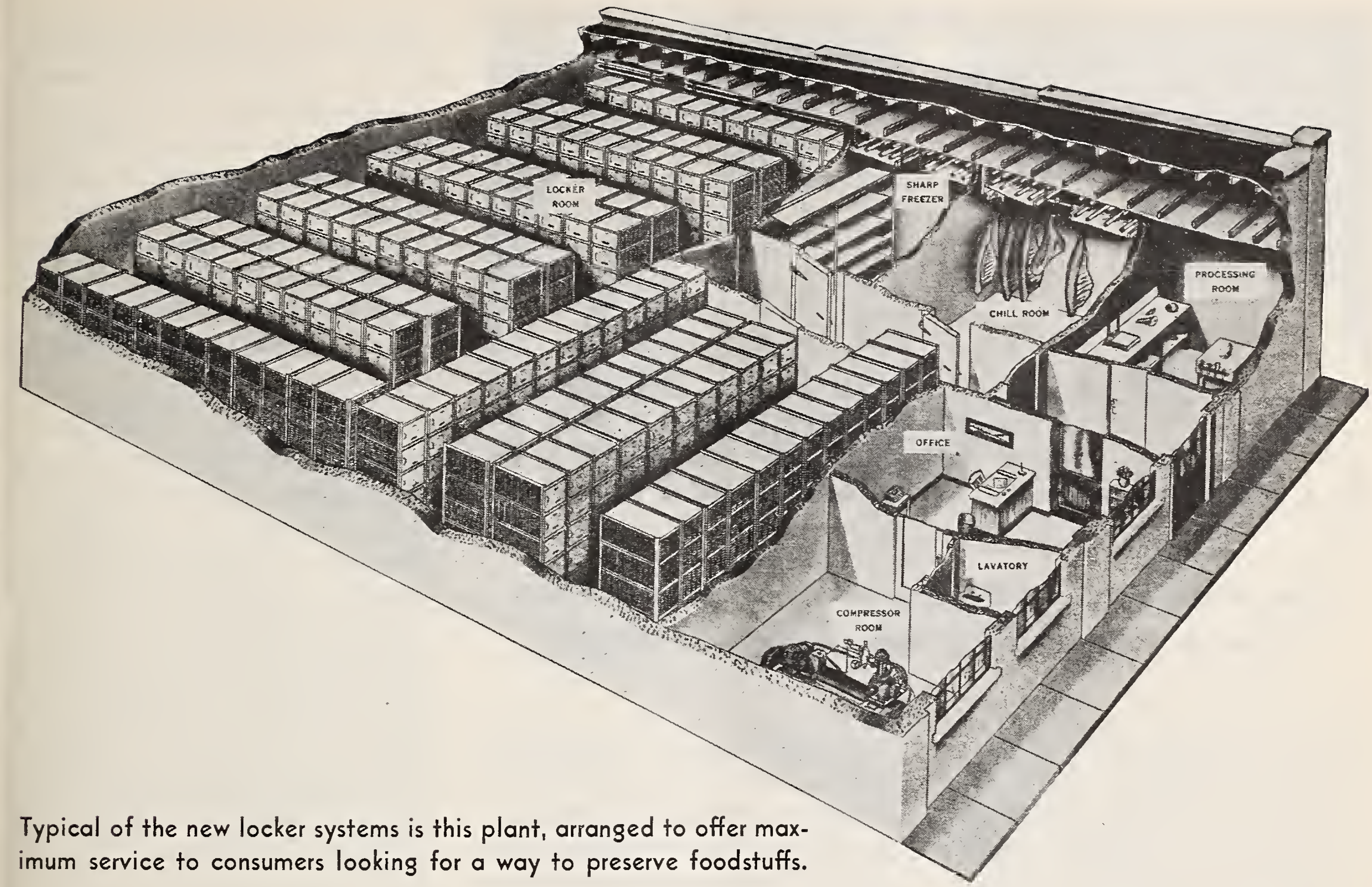
Already unofficial estimates give the number of operating locker plants as around 2,500. About half of these are scattered through the Western and Northwest States, more particularly in the Pacific Northwest. Individual lockers number about 850,000, and rent around $9 a year. Clients probably take nearly 2,000,000 pounds of meat daily from their lockers, saving around $100 per family yearly in food bills.

Home of these miniature packing plants is Centralia, Wash. The idea for them originated in 1917—the result of a favor that an ice-plant owner did for a friend in storing a few pheasants. Not knowing what to do with the game, he tossed it in a can of water, froze it solid. Later the hunter remembered his birds, thawed them out, and found them as juicy as when they were bagged. The success of the experiment started a shower of similar requests. Soon the plant was so cluttered with barrels and boxes that the ice-plant owner built a separate storage room. charging a small sum for space. Later he built a special locker plant equipped with uniform boxes that held about 150 pounds of meat apiece. A side line initiated to cut overhead had turned into a business standing solidly on its own feet.

About 10 years after the first venture, the Walla Walla Dairymen's Association allowed farmers to freeze rabbits and produce in their butter-storage room. Once again the locker business throve—to such an extent in this case that not only did the association build special quarters, but two other plants opened their doors. This town of 16,000 had an individual locker for approximately 1 out of every 16 persons.

Private companies were not the only ones interested in the movement. For a long time cooperative farm associations had agitated for farmer-owned packing plants. These would help farmers and consumers narrow the price margin between them by eliminating the middleman's—that is, the butcher's—retailing expenses, which ordinarily fell to the consumer to pay. Consumers by the new method could buy direct from farmer or wholesaler—a whole side of beef perhaps. This the plant butcher would chop into cuts for the customer to store for future use.

Consistent booster of the movement was the Farmers' Educational and Cooperative State Union of Nebraska which, through its livestock commission company at Omaha, had been selling annually nearly a million head of cattle, hogs, and sheep to a large privately owned packing house. Finally, it decided to run its own packing plant in connection with the creamery branch. The Farmers' Union Creamery at Aurora, Nebr., followed suit by opening an annex last November at the request of farm women. Each locker was to hold about 300 pounds of meat. After 3 months of handling meat brought in by farmers or processed by the hired butcher, the co-op added a small slaughterhouse. Townspeople took an interest in the whole project and



Typical of the new locker systems is this plant, arranged to offer maximum service to consumers looking for a way to preserve foodstuffs.

rented about 20 percent of the locker space, buying meat supplies direct from farmers or from the butcher department of the plant.

Government, also, through the Works Progress Administration, has come to the aid of would-be locker renters. In Madison, Nebr., a municipal ice plant and cold-storage locker system has been completed under the sponsorship of town officials with the cooperation of the WPA. WPA paid half of the costs, mostly for wages, and the sponsors spent an equal amount for building equipment and material. Rents run low—around $4 a year. Reports have it that the plant opened April 1936 with 300 lockers and in 7 months had rented all of these plus an additional 40 that had to be installed to care for the overflow.

About $300,000 worth of cold-storage plants have been erected in various counties of Mississippi by the Mississippi State College authorities with WPA aid. The Mississippi locker systems are built of native stone, concrete, and brick, and have a combined meat-curing capacity of more than four and a half million pounds. It is said that a special feature is air-tight rooms for destroying insect pests. These plants not only permit the farmer to cure his meat at any period of the year and hold his perishable produce for the best market, but furnish permanent employment for a given number of persons, and seasonable employment for a much larger number. The establishment of these plants does away with back-yard methods of butchering hogs, as all hogs will be slaughtered and dressed at the plant under the direct supervision of the State Extension Department of the State College.

Purpose of all these plants is the same—to preserve food over considerable periods of time with as little loss in flavor and quality as possible. Customers rent boxes for one reason—to obtain better food at lower cost. Practically all cold-storage locker plants are built along similar lines: They have a reception office and machinery room, a chill room, processing room, quick-freeze, and locker room. Each is independently and automatically controlled.

Typical itinerary of a piece of beef is this: Meat animals go to the chill room immediately after butchering. There they age in a steady temperature of around 33° F. Next they pass to the processing room where the butcher cuts steaks, chops, and roasts to each client's order. He may grind sausage or render lard. Wrapped in paper and labeled, the cuts then go to the quick-freeze room where a zero or subzero temperature insures the fast freezing

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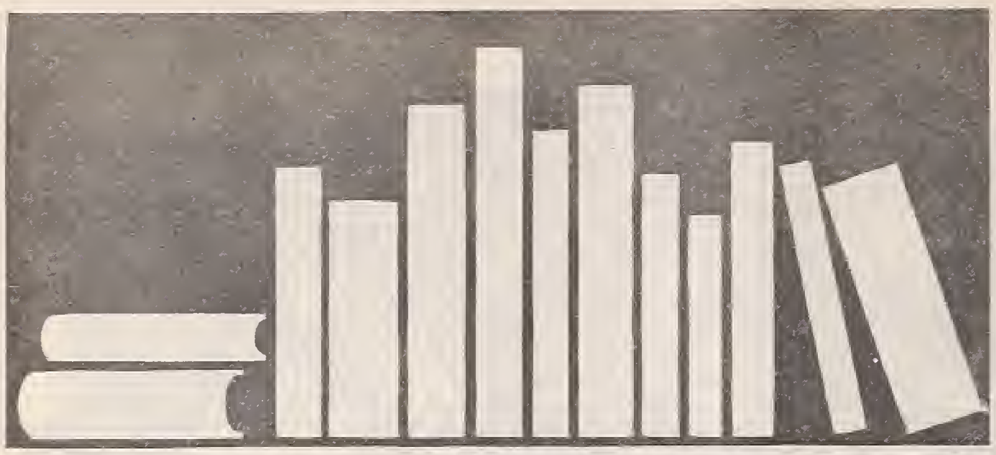


Consumers' BOOKSHELF

Here is the fifteenth installment of our bibliography of publications dealing with consumer problems

A Study of Quality Demands in Household Buying of Food, by Margaret I. Liston. Bulletin 415. 1937, pp. 39. Address: Vermont Agricultural Experiment Station, Burlington, Vt. Free. Says the foreword of this pamphlet, "The results of a study designed to determine what qualities household buyers seek in seven foods commonly purchased, how these characteristics are identified and products possessing them obtained, to what extent established grades and standards are recognized by homemakers, and the nature of their opinions concerning the matter of grading and standardizing certain Vermont-grown foods indicate very strongly the need for consumer education in such matters, as well as for further research in the field of household buying." The foods included in this study are butter, eggs, apples, potatoes, turkeys, beef, and oranges.

Vocational Homemaking Education for Secondary Schools. Bulletin No. 16. 1937, pp. 268, illustrated. Address: State of South Dakota, Department of Public Instruction, Pierre, S. Dak. 75 cents. This course of study contains a section on consumer buying. Pages 187–217 cover units on buying satisfactions, health, clothing and textiles, foods and nutrition, home furnishings and equipment. An advanced unit on home furnishings and equipment is suggested.

Specifications for Purchasing Canned Fruits and Vegetables, by Paul M. Williams. 1937, pp. 21. Address: The Consumers' Project, United States Department of Labor, Washington, D. C. Free. This publication will be of special use to buyers for institutions and cooperatives, or any group ordering in sufficient quantity to buy canned fruits and vegetables by specifications. Lists items which should be considered in making the purchasing contract, and gives names of fruits and vegetables for which U. S. standards are available.

Consumers' Cooperative Statutes and Decisions. Issued by The Consumers' Project, United States Department of Labor. 1937, pp. 219. Address: Superintendent of Documents, Washington, D. C. 20 cents. Reproduces the cooperative statutes of the States which have laws, and summaries of the judicial decisions interpreting these statutes.

Selection and Use of the Electric Iron, by P. B. Potter and Frances Hicks Bass. Bulletin 307. 1937, pp. 30, illustrated. Address: Virginia Agricultural Experiment Station, Blacksburg, Va. Free. Contains suggestions to follow in purchasing an electric iron based on the results of numerous tests. Gives two pages of suggested standard specifications for electric irons, and includes a general discussion of proper methods of ironing.

Selection, Operation, and Care of Electric Household Equipment. Extension Bulletin No. 215. 1937, pp. 12, illustrated. Address: Extension Service, Purdue University, La Fayette, Ind. Single copies free, 1 cent each in quantity. Contains brief statements giving general information on the selection and operation of the following kinds of electrical equipment: Washing machines, irons, ironers, vacuum cleaners, ranges, and refrigerators.

Resale Price-Fixing Under the Fair Trade Laws, by the Editorial Staff. "Business Week", August 28, 1937, pp. 38–44. Reprints of this special magazine section may be secured from Business Week, 330 West 42d Street, New York, N. Y. 5 cents. With "fair trade" laws on the statute books of 42 States and the Tydings-Miller bill now a part of Federal law, increased study will be given price-fixing. This review of the legislation and its operation, "to help manufacturers see how it is built, to know how it functions, to determine just what he stands to gain or lose by its operation", will also be found useful by consumers studying this subject.

CONSUMERS' COOPERATIVE ADVENTURES, by Harlan J. Randall and Clay J. Daggett. 1936, pp. 642, illustrated. Address: Whitewater Press, Whitewater, Wis. $2. After a brief introductory statement on the cooperative movement in England, this book presents factual case studies of individual cooperatives in various sections of the United States. Among the types of organizations discussed are cooperative retail stores, oil companies, wholesales, credit unions, burial associations, rural electrification cooperatives, and educational organizations. Intended primarily as a source book for high school classes.

NOSTRUMS AND QUACKERY AND PSEUDO-MEDICINE, Vol. III, by Arthur J. Cramp, M. D. 1936, pp. 222, illustrated. Address: American Medical Association, 535 North Dearborn Street, Chicago, Ill. $1.50. The author of this book is Director of the Bureau of Investigation of the American Medical Association. Reports are given by brand name on a wide variety of so-called "cures", "treatments", "tonics", food fads, and mechanical nostrums based on the findings of the Bureau of Investigation, the Notices of Judgment of the United States Food and Drug Administration, and the Fraud Orders of the Post Office Department.

WASHING, CLEANING, AND POLISHING MATERIALS, by F. W. Smither, United States Bureau of Standards. Circular No. 383. 1930, revised 1935, pp. 47. Address: Superintendent of Documents, Washington, D. C. 10 cents. Treats of the composition and proper use of different types of soaps, alkaline cleansers, dry cleaning materials, polishes, and sweeping compounds. Some of the discussion is technical in nature.

WEIGHTS AND MEASURES IN CONGRESS, by Sarah Ann Jones, National Bureau of Standards. 1936, pp. 19, illustrated. Miscellaneous Publication M122. Address: Superintendent of Documents, Washington, D. C. 5 cents. Some consumer buying classes and club study groups which include a consideration of weights and measures administration in their work will be interested in this pamphlet giving the early history of the weights and measures activities of the Federal Government. It recounts the attempt to secure uniformity of weights and measures from the time of the Continental Congress to 1838.

FACTS ABOUT LINOLEUM, by Charlotte P. Brooks. Brieflet No. 454. December 1936, pp. 3, mimeographed. Address: Extension Service, University of Vermont, Burlington, Vt. Free. Describes very briefly the different kinds and grades of true linoleum. Calls attention to types of floor coverings often called linoleum but which have entirely different methods of manufacture.

A STUDY OF OVENS USED FOR DOMESTIC COOKING PURPOSES, by Gail M. Redfield. Bulletin No. 416. 1936, pp. 20, illustrated. Address: Purdue University Agricultural Experiment Station, La Fayette, Ind. Free. A technical study of gas and electric ovens for use in the home, reporting their energy losses, thermal efficiencies, heat retention, heat distribution, and accuracy of thermostatic controls. Brand names are not given.

HOW TO BUDGET AND BUY FOR BETTER LIVING, by Rose Biery Andrews. 1937, pp. 31. Address: Home Service, Reader Mail, Inc., 635 Sixth Avenue, New York, N. Y. 10 cents. Discusses briefly the general purposes of budgeting, ways of improving spending habits, and methods of keeping a budget.

COSMETICS—A RADIO DIALOGUE, by Mrs. Dennis E. Jackson. 1936, pp. 7, mimeographed. Address: Consumer Conference of Greater Cincinnati, School of Household Administration, University of Cincinnati, Cincinnati, Ohio. 10 cents. This mimeographed bulletin is one of the radio scripts used for the weekly programs sponsored by the Consumer Conference of Greater Cincinnati and given over Station WCPO. The bulletin tells something of the need for regulation of cosmetics by a new Food and Drug Law.

LUBRICATING OIL, GASOLINE AND KEROSENE INSPECTION, AND TRACTOR FUEL, by Culver S. Ladd, State Food Commissioner and Chemist. Bulletin No. 48. May 1936, pp. 100. Address: State Food Commissioner and Chemist, Bismarck, N. Dak. 30 cents. Gives technical data on tests of gasoline, oil, kerosene, tractor fuel, and dry-cleaning fluids sold in North Dakota. Products are identified by brand name, name of manufacturer, and seller.

Your Food Supplies & Costs

Apples and grapes occupy the spotlight on the food calendar during September and October. Heaviest shipments are not due until October but September marketings ordinarily are large. Prices lower than a year ago are in prospect for both fruits. The grape crop is over one-quarter larger than in 1936, and the largest since 1928. Apple production is indicated to be about three-quarters larger than last year's small crop, and the largest since 1931.

Retail food costs moved down one-half of one percent during the month ending August 17 as a greater than usual decline in the cost of fresh vegetables and apples offset price advances in butter, eggs, and meats. The total cost of items in the consumer's market basket has dropped slightly during each of the past 3 months because of declines in vegetable prices resulting from relatively large crops. Advancing meat prices have nullified most of these sharp price declines and have tended to prevent costs in general from going below their 1936 level. On August 17, the index of retail food costs as reported by the Bureau of Labor Statistics stood at 85.5 percent of the 1923–25 average and was only 1.8 percent higher than a year ago.

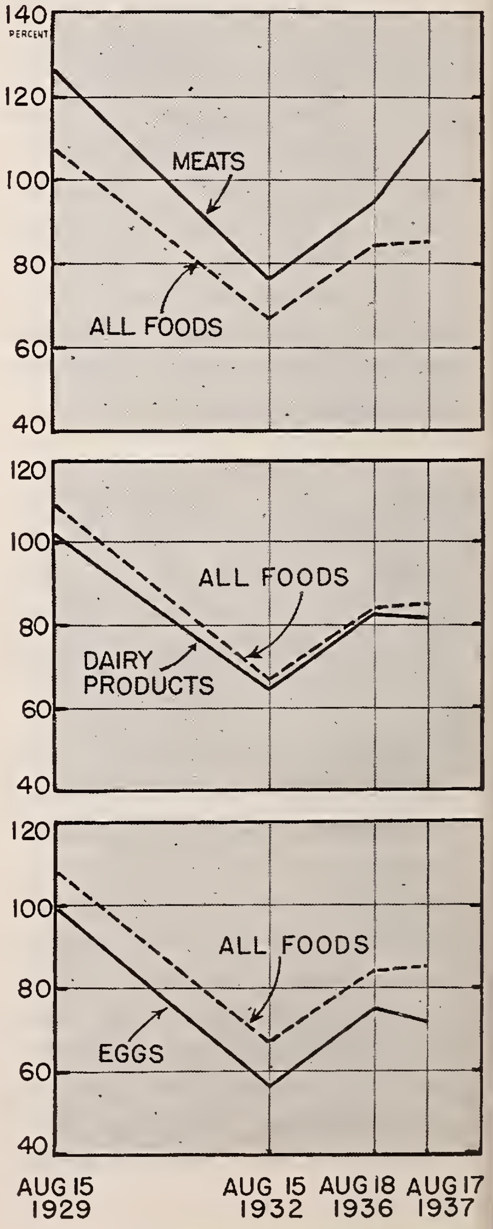
Major price changes during the 4-week period were limited to eggs, meats, dairy products, and fruits and vegetables. Egg prices registered the largest increase, but the 6 percent advance was about the usual change that occurs at this period of the year. Higher prices for poultry, pork, and beef offset slight declines in lamb prices, and meat prices in general jumped 3.5 percent. The cost of dairy products moved up seasonally around 1 percent. Fruit and vegetable costs, however, declined 12 percent, as the prices of most vegetables and all fruits except citrus hit their lowest level for this year. The cost of cereals and bakery products remained unchanged for the second month in succession. Fruit and vegetable costs are 18 percent lower than a year ago while meats are about the same amount above. Changes from 1936 for other food groups are as follows: Eggs 4 percent lower, dairy products down 1 percent, fats and oils up 7 percent, and cereals and bakery products 4 percent higher.

Source of vegetable shipments shifts from local market gardens to the late producing States this month. These States supply from 70 to 80 percent of annual potato and onion requirements, about half of annual cabbage supplies and nearly two-fifths of yearly celery production. The harvesting of these crops ordinarily ends in October. Part of production is placed in storage from which supplies continue to be available until new crops mature early in the following year. Low point in prices usually is reached when the harvest is at its peak. The trend is upward after shipments from storage commence.

Vegetable supplies from the late producing States with the exception of onions are expected to be bigger than in 1936. Last year, drought sharply curtailed production of all late vegetable crops except onions, the production of which was of record size. This year's domestic cabbage crop appears to be 50 percent larger than in 1936, while potato production is expected to be about one-fifth larger. An above-average onion crop is in prospect but supplies may be about one-tenth smaller than in 1936.

Fresh vegetable and apple prices hit their lowest retail level for 1937 on August 17, and all items except

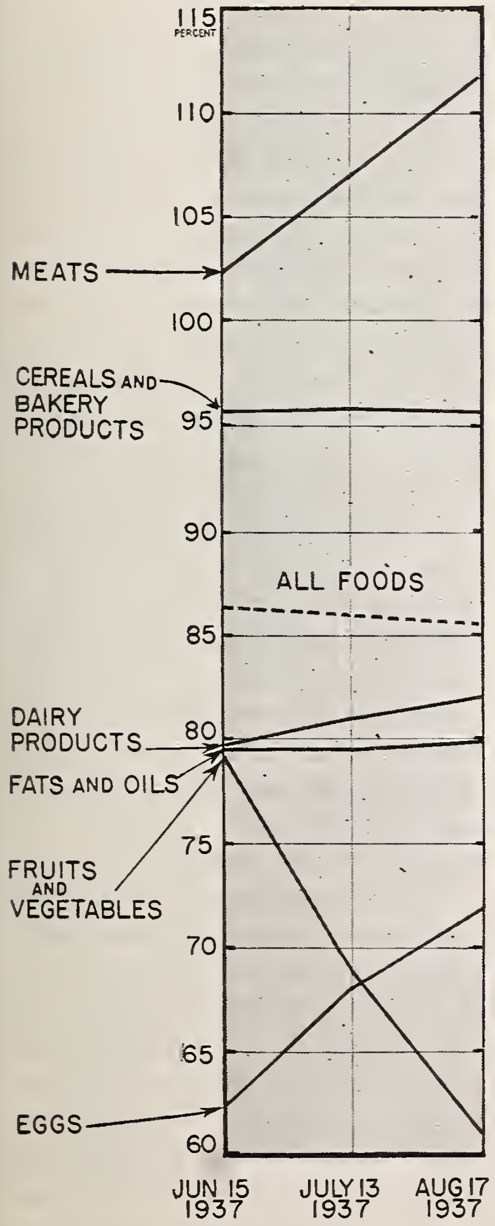
A PERSPECTIVE OF FOOD COST CHANGES
1923-1925=100



citrus fruits were lower in price than last year. The retail prices of potatoes, cabbages, and onions moved down around one-quarter of a cent a pound during the monthly period. Onion retail prices are about the same as a year ago, but cabbage and potato prices are down 50 percent. A 2 cents per pound decline in apple prices resulted from a bumper apple crop.

Butter production is declining seasonally and prices are expected to make their usual rise until they reach their peak in November or December. Prices have been lower than a year ago, but they probably will go above their 1936 level the latter part of the year. From September through May, part of supplies come from cold storage, with heaviest out-of-storage movement in the winter months. Butter storage holdings on September 1 were much higher than a year ago and slightly above average. Butter prices to consumers moved up one-half cent per pound from July 13 to August 17 but were 4 cents a pound lower than a year ago.

A CLOSE-UP OF FOOD COST CHANGES
1923-1925=100



Poultry prices most likely will not register their usual decline from July through December, and it appears probable that some price increases may occur. Fresh-dressed poultry hatched during the first half of the year is the major source of supplies in these months. Relatively high feed prices early in 1937 caused a sharp reduction in hatchings. The number of young chickens on farms on July 1, was one-fifth smaller than last year and the smallest on record. The retail price of roasting chickens advanced 2 cents per pound during the 4-week period and was 2.5 cents a pound higher than in 1936.

Egg production has continued at relatively high levels for this time of the year. Large fresh receipts coupled with heavy storage holdings have tended to slow down the seasonal price increase that occurs after production reaches its high point in May. During the month ending August 17, retail egg prices jumped 2 cents a dozen but were the same amount lower than a year ago.

Hog marketings are expected to increase seasonally after September as spring pigs begin to come to market in fairly large numbers. The usual drop in hog prices in prospect for the fall and early winter may come later than usual and may occur mostly after November. Ordinarily the downward price movement ends by mid-December. This year farmers probably will hold their hogs for marketing at heavier weight due to large feed supplies and there may be a considerable increase in marketings in late December and January and a smaller movement earlier.

Beef cattle supply situation remains unchanged from a month ago and no appreciable price changes are expected until 1938. Continued small marketings of grain-fed cattle most likely will keep prices of better grades at or near their present high levels during the remainder of 1937. But a greater than usual decline in prices of these cattle is expected during the first half of 1938, at which time a considerable increase in marketings is in prospect. Prices of lower-grade cattle probably will not register their usual decline during the remainder of the year because of a strong demand by cattle feeders for animals to be fattened on the 1937 corn crop.

Seasonal increases in lamb slaughter are in prospect during the remainder of the grass-fat lamb marketing season which ends December 1. Supplies probably will be larger than average, but not much different from a year ago. From December through May, slaughter consists of grain-fed lambs. A strong demand by feeders for lambs to be fattened on this year's corn crop, and then to be sold during the grain-fed season, is expected to keep live lamb prices at or near their present level.

Retail meat prices with the exception of lamb went up from July 13 to August 17 and were from 2 to 10 cents a pound higher than a year ago. Fresh pork prices jumped 2.5 cents a pound, while ham and bacon respectively were 1.5 and 2 cents a pound higher. In beef, steaks advanced almost 1.5 cents a pound and roasts went up around 1 cent a pound. Lamb cuts declined about one-half a cent a pound. Meat prices are higher than a year ago by the following amounts per pound: Lamb 1.5 cents, bacon 2 cents, fresh pork 8 cents, ham 2.5 cents, beef roasts 7 cents, and steak 10 cents.

OUT OF THE LOCKER

[Concluded from page 13]

that preserves color and flavor.

Last journey of the packaged product is to the locker room, furnished with tiers of lockers. Temperature here ranges from 10° to 15°, staying on the low side of 15°, since a rise in temperature means certain trouble ahead. Comparatively low temperature is the first essential for successful storage; second essential is cleanliness. That is why lockers are constructed so that air can circulate around and through them; that is why lockers are often metal-built and removable. Probably with the spread of locker plants, it will be necessary for local and State, if not Federal, authorities to step in and put them under pure-food control laws to safeguard customers against public health problems.

Already the question has cropped up as to how to prevent spoilage. In answer to queries from housewives, ice-plant owners took a hand in suggesting approved methods. The United States Department of Agriculture has come forth with a mimeographed leaflet, "Suggestions for Freezing Foods." This treats of fruits and vegetables to be preserved by freezing. It lists desirable varieties, gives information on harvesting, handling, preparation, containers, packing, freezing, and subsequent storage. Although primarily intended for commercial use, the booklet holds hints for housewives too.

First commandment in preparing vegetables for frozen packs is to scald them, as suggested in the leaflet. Different vegetables call for different scalding times; for instance, asparagus should be cooked for 2 to 3 minutes in boiling water, then cooled in running water; scalding husked corn on the cob takes slightly longer, 3 to 4 minutes. Scalding inactivates the ferments that are responsible for deterioration occurring at low temperatures. It sets color, also, and for some products makes packing easier.

Fruits intended for frozen packs are not treated with heat, as a general rule, except where steam-peeled. It is possible, however, to heat light-colored fruits just enough to take away the raw character of the fruit and check the browning tendency before these fruits go into the storage lockers. Though the fresh quality of fruits is lost by this method, some consumers seem to prefer it.

Vegetables are packed with a 2-percent brine solution, or without liquid—that is, in a dry pack. Experiment indicates that these methods have advantages, though certain vegetables can be prepared in other ways. Fruits are covered with a sugar sirup before they go into their containers. With apricots, to take one example, a 40 to 50 percent sugar sirup is a successful packing medium. Dry sugar packs aren't generally satisfactory, because the fruit tissues collapse on thawing when this method is used. And packing unsugared fruit is never recommended.

Speed seems to be the essence in getting the packaged fruits and vegetables into storage and subsequently in serving them at the dinner table. Remember that frozen-pack fruits and vegetables are not sterile and must be used like fresh produce—that is, they must be disposed of within a maximum of 48 hours after thawing, even if kept at a temperature around 30° to 40° F.

Frozen fruits, after thawing, may be eaten raw, cooked, or made up into frozen desserts. If eaten raw, they should be thawed until a small amount of ice is left—just enough to keep the product thoroughly chilled until consumed.

Vegetables must be cooked once they come out of the storage lockers. This is done in one of two ways, depending upon whether they were frozen in brine or without liquid. With the dry pack the vegetable is generally placed in boiling water while still hard-frozen. In the former case, thawing in the original brine produces better quality in most vegetables. Cooking time is usually shorter for frozen-pack vegetables than for the ordinary kind.

CONSUMERS' QUERIES AND COMMENTS

[Continued from page 2]

preparation, and service of food for children were studied. When they turned their attention to "hurry-up" meals, they worked out a well-planned menu which could be served in 30 minutes without advance notice.

Finally, to round out the whole experiment, a questionnaire was sent to each member several days before the last meeting asking such questions as these: How did your family react to the experiment? What did you get out of it? What did your analysis of your family food costs and menu planning mean to you? What was the cost per person per meal in your family for the 30-day period? What was the estimated saving to your family budget?

In the food-cost analysis for the group it was found that, for those using the minimum-cost diets, meals cost an average of 11 cents a person a meal for the 30 days. These families saved an average of $9.25. For the group using the moderate-cost diet, the cost per person per meal was 15 cents, and the average saving for each family was $4.30.

"I am serving much better meals at less cost", seemed to be a fairly general achievement. One mother stated, "It is a relief to *know* that you are feeding your family proper foods." Another said, "We will certainly be prepared if we have another depression, but, best of all, it is helping us right now with advancing food prices." A young homemaker reported, "I have found that I have not been feeding my family enough of the right kinds of food. I thought that instead of cutting down on food costs I would have to increase them to include all of the foods necessary to insure good health, but to my amazement I have found that I have actually saved money." The secret of saving the family budget learned by one efficient homemaker was, "Plan your meals, don't buy them! Our grandmothers of necessity planned carefully the family food supply—often for months ahead—and used up all left-overs in clever combinations. They didn't run down to the store before every meal but actually *made* their meals. We, too, have learned that lesson." So convinced of the value of planning were several of the group that they promptly sent to the Extension Service of the United States Department of Agriculture for ideas on how to keep records of *all* family expenditures.

Records such as this one bear testimony to the accuracy of conclusions of the Bureau of Home Economics experts who examine family food expenditures galore. Some consumers, they point out, achieve a good diet on little money, while others miss it with more money. There are families, tragically, whose food money is so meager that not even the wisest nutrition expert could contrive for them an adequate diet. At the other end of the income scale are families with so much money that no matter how carelessly they plan they end up with a nourishing diet. Between these two limits are millions of consumers who, if they knew the rules of good nutrition, could make pennies go farther and health grow stronger. That's one of the reasons why the Government has a Bureau of Home Economics and such home demonstration agents as this ingenious one in Wyoming.

STUDY QUESTIONS FOR THIS ISSUE

1. Give several important features of the food-buying experiment tried by consumers of Washakie County, Wyo.
2. What is a cold-storage locker plant? Could your community use such a plant to advantage?
3. Why are cold-storage locker plants called "pocket-size packing houses?"
4. How has the Government aided locker renters?
5. In what two ways are vegetables packed for storage?
6. What points should you consider in purchasing a shoe?
7. What constitutes good fit in a shoe? And why is good fit essential?
8. List some of the sturdier shoe leathers.
9. What characterizes the best suede?
10. How is patent leather made?
11. What are two of the commonest types of shoe construction? Describe them.
12. How can the X-ray be used to advantage in a shoe store?
13. How can you prolong the life of shoes? How remove oil and grease from leather?
14. What does the trade name "Elk" signify?
15. Why is clear textile-fiber identification particularly necessary at the present time?
16. Describe the procedure in a Federal Trade Commission case involving misbranding and false and misleading advertising.
17. What action are certain stores taking to get accurate information about the fabrics they sell?
18. Give several types of cases receiving the attention of the Federal Trade Commission.

OUR POINT OF VIEW

The CONSUMERS' GUIDE believes that consumption is the end and purpose of production

To that end the CONSUMERS' GUIDE emphasizes the consumer's right to full and correct information on prices, quality of commodities, and on costs and efficiency of distribution. It aims to aid consumers in making wise and economical purchases by reporting changes in prices and costs of food and farm commodities. It relates these changes to developments in the agricultural and general programs of national recovery. It reports on cooperative efforts which are being made by individuals and groups of consumers to obtain the greatest possible value for their expenditures.

The producer of raw materials—the farmer—is dependent upon the consuming power of the people. Likewise, the consumer depends upon the sustained producing power of agriculture. The common interests of consumers and of agriculture far outweigh diversity of interests.

While the CONSUMERS' GUIDE makes public official data of the Departments of Agriculture, Labor, and Commerce, the point of view expressed in its pages does not necessarily reflect official policy but is a presentation of governmental and nongovernmental measures looking toward the advancement of consumers' interests.

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Shoe values come to those who know materials and workmanship that make for wear.

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Not only consumers but producers, too, stand to gain from more informative and accurate labeling of fabrics. Here are some notes on recent developments in the movement for better labeling.

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Here is a record of how cold-storage locker plants help some consumers to get better food at lower cost.

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CONSUMERS' Guide

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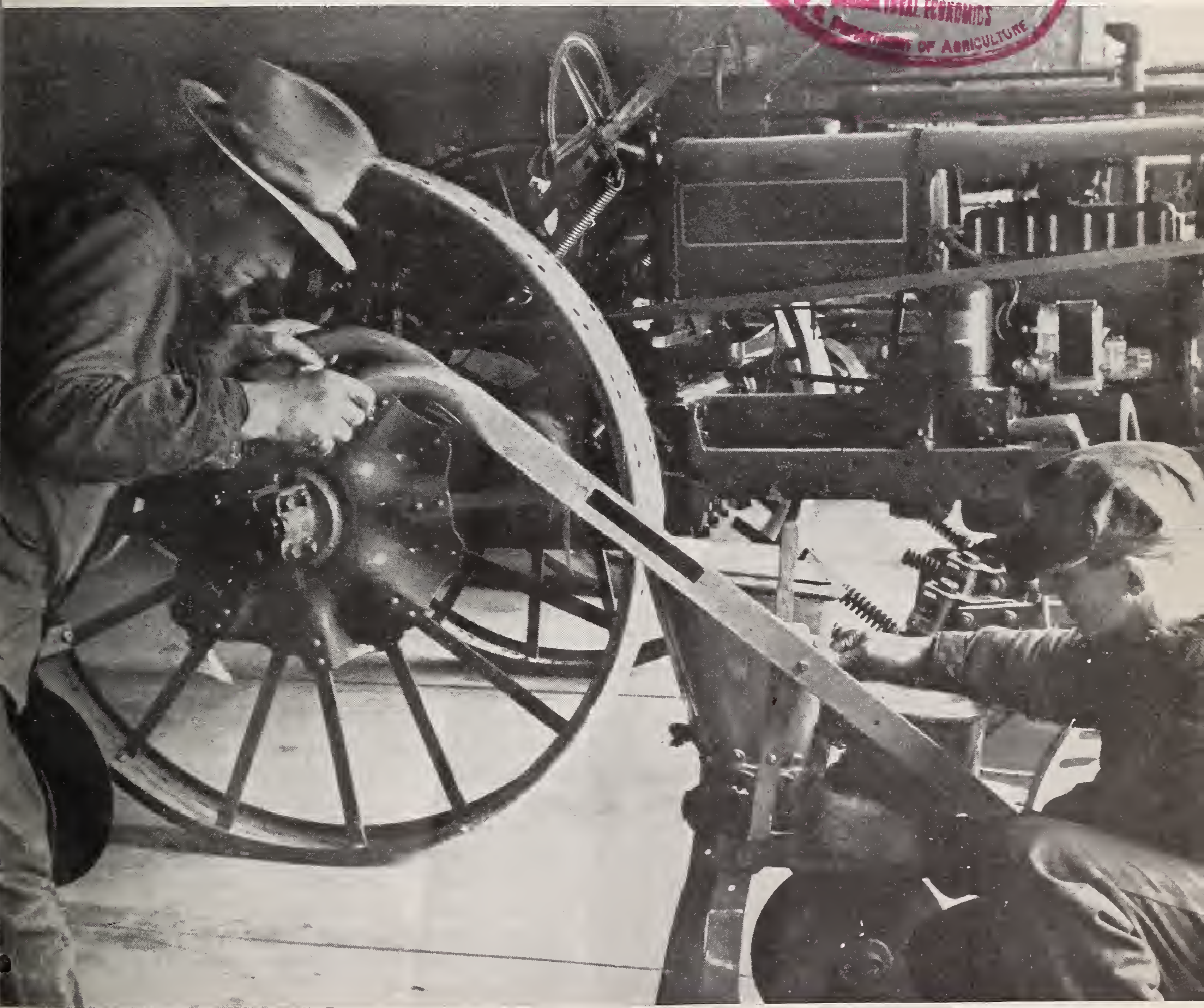


TECHNOLOGY ON THE FARM

CONSUMERS' Guide

Issued every two weeks by the Consumers' Counsel, Agricultural Adjustment Administration, Department of Agriculture, Washington, D. C.

VOL. IV, NO. 14 OCTOBER 4, 1937

RETURNS still come in from readers who want to register their votes in our poll on informative labeling. In our April 19 issue, we asked our readers: Would you like to be able to buy goods that are labeled and advertised so as to give you technical facts about their construction, their durability, their contents? Later issues (May 17, July 12) reported reader reaction to this question. Then and now the preponderance of votes is in favor of more informative labeling; not too technical, but facts that make it possible for consumers to know better the quality of the thing they are buying and to compare its quality more accurately with alternative articles. . . . Now comes a consumer in Connecticut to try to confound us. We enjoyed his tongue-in-cheek letter and want to share it with our readers:

"I do *not* favor the trend toward grade labeling and consumer standards in the things I buy", he writes. "It is much more fun to be fooled.

"Grade labeling would take away the element of surprise each time I opened a tin of canned food. It is these little surprises that add zest to life. If I knew what was in the soap and shaving cream that I buy I would be deprived of all the glamour that is usually associated with these products. Glamour offers an escape from a humdrum life.

"Think of the millions of people who would have to forego their reading matter in the newspapers and magazines if glowing advertisements used simple terms in describing their products. No, sir! It would take all the sport and adventure out of buying. . . .

"It is thrilling to buy by guesswork. . . . Grade labeling is of use only to those who are finicky and want to know just what they are spending their money for. They have no sporting blood. Fortunately they are few. As for me—fool me every time. It's wonderful."

MORE NEWS comes our way having to do with weights and measures—this time from the Consumers' National Federation. The Federation, always alive to matters of consumer concern, sent its representatives to the Thirty-first Annual Convention of the New York State Association of Sealers of Weights and Measures, held in New York City during 2 days in July. There officials from various cities gathered 300 strong to discuss the problems of maintaining fair weights and measures practices. In this case, the consumer didn't have to step up to safeguard his own interests; those interests were ably championed by the Government sealers, as these weights and measures men are generally called.

Need for teamwork proved the keynote of the convention. New York City's Commissioner of Markets put it squarely up to the Nation's housewives to "aid in the campaign to maintain prices at a fair level by carefully scrutinizing the size and weight of all foodstuffs purchased."

Result of this appeal was immediate. The delegates from the Federation met in conference with the New York City weights and measures officials, who offered to sponsor a program of consumer education.

To readers of the CONSUMERS' GUIDE, well aware of the weights and measures problems (discussed in the November 6, 1936, and April 19, 1937, issues), we pass on some suggestions made at the convention:

First, see whether or not there is a Government official—State, county, or city—whose duty it is to test the weights and measures used in your grocery or dry-goods store. Then write or call on this person offering him your cooperation. Find out how often he gets around to test each scale and measure, and what sort of seal he puts on one to show that it is accurate. Then keep an eye open for the seal whenever you shop.

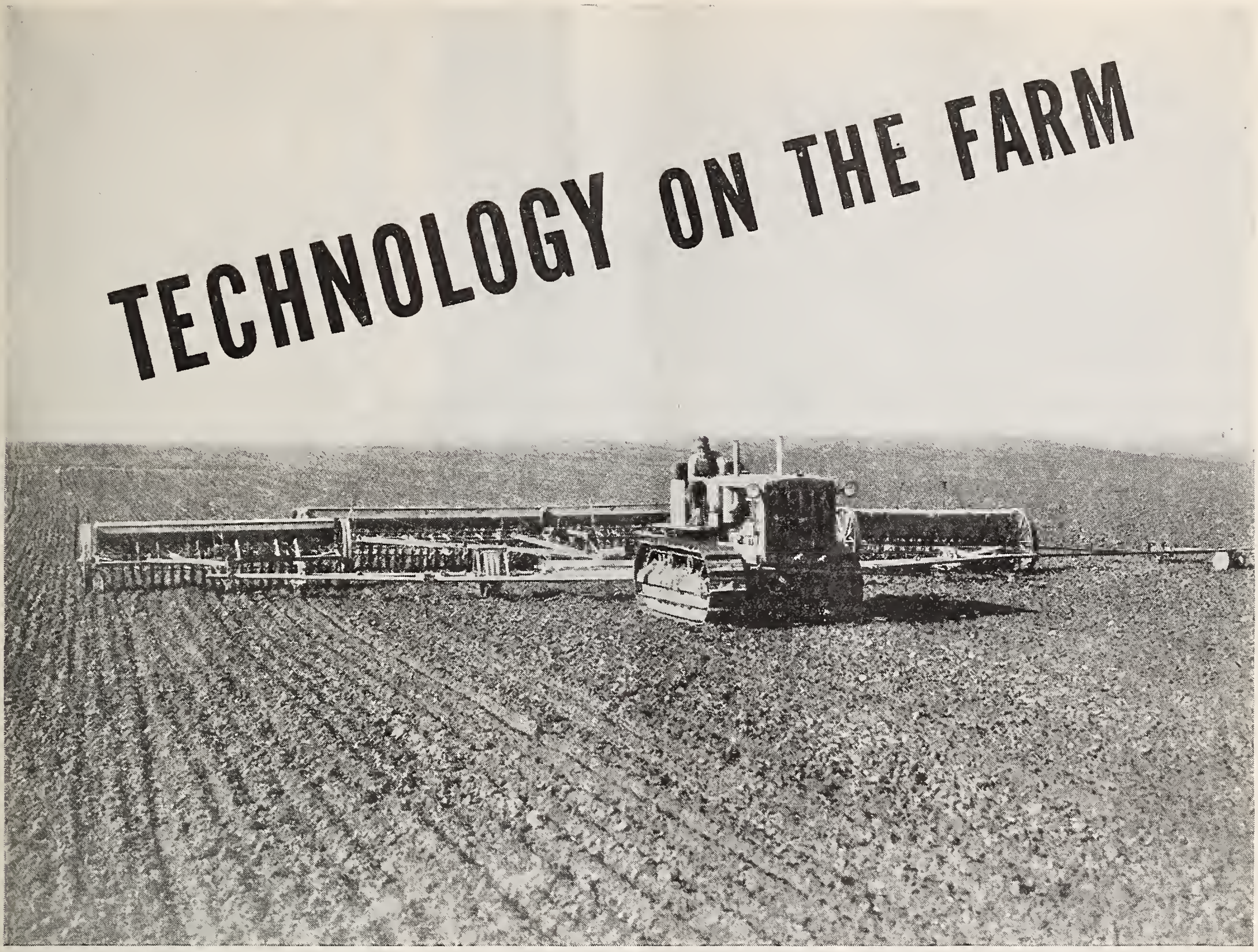
Important reminder is to watch the indicator on the scale to make sure that your grocer isn't short-weighing you even though his scales are correct. Consumers might ask their sealer to arrange a practical demonstration with a tested scale. For this the convention gave first-rate hints: "Weigh that 5-pound bag of loose sugar that was put up overnight. Weigh the package of bacon—last year 100 retailers in New York City pleaded guilty to selling 6-ounce packages of bacon for half-pounds. Can you tell how much air is whipped into your ice cream when it is sold by bulk instead of weight? This is one of the new ways of wrapping up air and selling it."

Consumers would do well to remember that every weights and measures inspection service must have sufficient funds, well-trained personnel, and full equipment if it is to prove a good watchman of public interests. In New York City, it is reported, the weights and measures department still has no fuel-oil gage to check the meters of fuel-oil dealers, though they have equipment for weighing coal trucks and testing gasoline meters.

General in application, these suggestions should be useful to housewives wherever they are—in Peoria or San Francisco as well as in New York City.

WATCH the CONSUMERS' GUIDE for announcement of a national consumer campaign for honest weights and measures. Your Consumers' Counsel Division is drawing up plans now.

TECHNOLOGY ON THE FARM



Consumers have common interest with the farmer in the turn that technological developments may give to rural life. Here we have some observations that Government experts, turned prophets, make about technology and the future of agriculture

THERE is fascination in forecasts whether made by a gypsy fortune-teller whose palm has been crossed with silver or by a Jules Verne writing of things yet to come. Prophesy can amount to more than a pastime in certain circumstances. If based squarely on knowledge of past trends, it can serve as a key to successful planning. To bring the matter to our own home grounds, a review of past events followed by a long look ahead into the future might help America put her natural resources to best use. Not that anticipation would provide a beacon by which business, agriculture, and labor could chart an undeviating course. That would be too much to expect. But at least it would suggest a general direction in which to steer.

With this belief, members of the National Resources Committee agreed, and on the strength of it, set themselves the task of making predictions in the field of technology. Reason for their choice of subject: Invention is the greatest general cause of change in the modern world. For instance, the automobile, a curiosity in 1900, has within 30 years transformed cities, created a whole new unit of population—the metropolitan area. It affected countless lives by drawing thousands of persons from remote districts into the trade belt widening around cities and by hurling city populations into suburbs. The inventor of the auto has been said to have wielded more power than Caesar, Napoleon, and Genghis Khan rolled into one.

Now the result of the Committee's study of technology, past, present, and future, appears in a volume, "Technological Trends and National Policy",* "the first major attempt to show the kinds of new inventions which may affect living and working conditions in America in the next 10 to 25 years. . . . It emphasizes the importance of national efforts to bring about prompt adjustment to these changing situations with the

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**On sale by the Superintendent of Documents, Government Printing Office, Washington, D. C. Price, $1.*

Breeding experiments have meant livestock better suited to man's use. These lambs bear witness to the success attained in raising lambs primarily for heavy wool yield.

least possible social suffering and loss and sketches some of the lines of national policy directed to this end."

Though the Committee deals with many fields touched by technology, its findings in only one field—that of agriculture—concern us in this article. Anyone hoping that the Committee charted a map showing just the road that agriculture, mounted on its sturdy steed technology, will take is bound to be disappointed. Predicting is a tricky business beset by pitfalls. Government forecasters prefer to leave extravagant phrases to the crystal gazers and stick closely to caution.

Consequently they have surveyed the past, pointed out general trends that will probably continue, and posed the problems faced by technology and agriculture rather than offered solutions to those problems. Following their lead, we will treat of generalities. We will discuss the advance of technology in the field of agriculture and its implications. More particularly we will try to shed some light on the questions that America must face if she is to plan intelligently for the future of agriculture.

Technology as a tool of industry is a familiar story. Less familiar is the drama played with technology and agriculture as protagonists, stirring as it is. Technology has brought new machinery to the farm. It has brought power and light. It has contributed better plants and livestock. It has increased knowledge of soils. It has provided ways of coping with plant pests and disease. With surprising versatility it has handled the perfecting of marketing and managerial techniques. Nor has the bottom of technology's bag of gifts been reached. This it is safe to say: Technology, for all its accomplishments, is just getting off to a good start. Maximum efficiency, as a result of technological development, is still a lodestar on the distant horizon.

Let us take a closer look at the contributions technology has made to agriculture in the past. At the birth of our Nation, American farmers tilled their soil as their ancestors had done thousands of years before. Plows were crude wooden affairs. Sowing, cultivation, and harvest were matters for hand methods. Then, soon after the Revolution, commenced the long parade of inventions that carried farm productivity to new highs.

This series led off with the cotton gin. The grain cradle and iron plow came close upon its heels. By 1840 the threshing machine appeared opportunely since plenty of land was now available for growing the grain that was in demand in foreign markets. Invention flowed along steadily until the Civil War, when drain on the country's manpower spurred invention to new speed that resulted in the mowing machine, the steam tractor, the reaper. Climax of the development of farm machinery came later with the advent of the internal-combustion tractor, at last making possible conquest of the huge areas that had thus far resisted man's encroachments.

Meanwhile technology broadened its range of helpfulness. Breeding experiments resulted in better livestock, and in plants that could resist disease, yield larger harvests and hardier fruits. These new and improved strains of plants conspired with the tractor to help man to dominate the plains. New corn types pushed the Corn Belt westward, and importations of Russian wheat sent wheat-growing in the same direction. At the same time a war on plant disease brought victories all along the farm sector. Hoof-and-mouth disease was wiped out and rust-resistant wheat was developed. This story does not begin to cover the contributions to agriculture made by technology—the advances in transportation by motor truck, improvements in refrigeration that opened the way to improved quality in farm products and to reducing waste, the market news service that by radio reports keeps the farmer abreast of price changes so that he can take advantage of favorable conditions.

Figures show the way that contributions of technology stepped up productivity of the agricultural worker. Since the year the Constitution was framed, the farmer's ability to feed city people, as well as himself, has increased many times. In 1840 agricultural workers comprised 77.5 percent of all persons gainfully employed in the United States; since then, the proportion has dropped steadily until in 1930 it was only 21.5 percent. Rate of increase in productivity, it seems, is a rising tide with no sign of abatement. Just as this trend in the past has spelled social change, so we must expect social cost as corollary to technological changes in the future.

We have mentioned contributions of technology that aimed directly at the goal of high farm efficiency. Results may be called the primary influences of the new technology. In another way it has increased farm efficiency by making available cheap materials and tools which the farmer can buy with farm products rather than produce himself.

Technology has affected rural lives in an indirect way. Inventors of the automobile, radio, telephone probably never gave the farmer and his problems a thought, yet their inventions left their mark on rural lives. Automobiles, the telephone, newspapers, the radio broke down provincial barriers, affecting rural fashions, manners, and morals. Invention brought the world to the farmer's door.

At least it brought the world to certain farmers' doors, for both these streams of influence—primary and secondary—spread unevenly over the countryside. This fact bears repetition. As the report says, "Farmers do not and cannot apply at equal rates the products of science and invention. Out of this fact arises one of the most significant impacts of technological change in agriculture." Technology is often hissed as the villain responsible for the fact that one farmer has his autos and electric refrigerators, while a second goes without. But guilt should rest not on invention, but on society, for the difficulty is with the "failure of the economic and social system to make needed readjustments."

Low incomes seem to be the main reason for certain farms lacking the modern conveniences—the electric power, refrigerators, etc.—that ease the rigors of farm life. Other farmers may be without such equipment yet have the finest tractors and machinery the market offers. These are the men who have emphasized production efficiency to such a point that they have overcapitalized their land and so lost their chance to have the household comforts enjoyed by some of their less prosperous brothers. In some types of agriculture per-capita production has increased much more slowly than in others. Mechanization hasn't helped the cotton, fruit, and tobacco grower as much as it has aided in the production of grain and hay crops.

Many times forces beyond the control of individual farmers militate for or against the use of discoveries. The relatively great distances between farms in the United States has handicapped electrification. In the case of tractors, topography has tabooed them in certain districts where land is too hilly or poorly drained. Dollars and cents raise a more general barrier to use of tractors, for tractors are expensive. Even though tractors may result in lower production costs and higher net incomes, their initial expense isn't justified if equipment is idle beyond certain time limits. A four-row corn planter, as the report says, is not economically justified on a farm that has only 10 to 20 acres of corn. Thus there has been added to the terms "man-sized farm" and "family-sized farm", the expression "tractor-sized farm."

Between these classes, "man-size", "family-size", "tractor-size", competitive tensions have grown up as technology advanced. "The man with the hoe and the man with a tractor" are not competitive equals where they are engaged in the same type of farming. There is bound to be resentment on the part of the small

Another product of inventive genius is the airplane duster to control insect pests. One plane can cover several cotton plantations in a day.

farmer toward his economic superior. Competitive tensions are bound to grow if agriculture continues in the way it has been going—toward greater concentration of land ownership with fewer farmers on fewer farms. Already legislators have grown alarmed at the turn agriculture has taken, have advanced legislative proposals to check both concentration of land ownership and tenancy in commercial farm production. Proposals to curb "corporation farming" have been made in several States. Programs to assist tenants and sharecroppers to buy land have been offered.

Some people might claim that technology in its advance has gathered such steam-roller force that it will inevitably sweep agriculture along toward greater concentration of land ownership no matter what opposition might be raised by man. The Committee on Natural Resources feels that this much is true—the force of technology cannot be stopped. But it feels that such force could be directed into socially desirable channels. If such guidance is attempted—and it is the hope of the Committee that it will be—a matter of prime importance is to agree upon a goal for agriculture. The alternatives, as the Committee sees it, are these:

"Should agriculture strive for maximum efficiency in production with larger and larger units, more concentrated ownership and management, and fewer and fewer farmers?

"Should it seek to support a large population with small incomes with an increase in the number of farms—an increase which would limit the application of technology?

"Should it seek some middle ground in which the ideal of 'family farms' is uppermost, that would limit without eliminating, further technological advance?

"Is there more justification for imposing a bar to technological advance in agriculture than in the case of numerous industries that have moved out of homes and small workshops into large factories?

"Instead of seeking to restrain technological advance would social ends be better served by concentrating on efforts to increase industrial production and employment in the expectation that jobs would ultimately be available to many excess agricultural workers?"

Inventions galore have made weather forecasting a more accurate science and agriculture a more efficient business. Here a forecaster of the Weather Bureau in Washington, D. C., examines a newly prepared map from which next day's forecasts will be made.

Answers to such questions the Committee does not try its hand at tracking down. Instead it shows the consequences that would result from certain courses of action and points out obstacles in the way of reaching other objectives. In other words, it puts up signposts along the various technological roads that agriculture can follow, but doesn't dictate a choice.

To return for a moment to the present trend in agriculture. As we have said, technological trends in agriculture have generally been toward bigness, toward extensive cultivation of large areas. There are important exceptions. Recently a curbing influence has been met in the development of small machinery units. In certain regions where there is intensive land use, farms have become smaller. But in general large-scale operation is growing. It brings certain advantages that cannot be denied. Larger units tend to reduce production costs and increase net income. They make possible a greater division of labor with more specialization; they justify larger investments in machinery; they make possible purchases of supplies in large quantities and reduce overhead much as large factories are better able than smaller competitors to cut costs.

So far the promises held out by the trend toward bigness look alluring. But if we start dreaming of achieving maximum efficiency quickly by sailing with this tide we run into trouble. The readjustment in terms of reorganization into larger units would be impossible in a short time. Capital has scanned the farming picture closely and seen risks it would be loath to assume. It

[Continued on page 18]

Tea tasters taste tea all day long without drinking a drop. To take more than a sip of one tea would impair their sense of taste for the next sample.

Tips from Tea Tasters

Tea makes its bid for favor by its flavor, not its food value. Knowing how to buy and how to prepare are prerequisites, connoisseurs warn, to getting full flavor value

Professional tea tasters have little fear that technological improvements or scientific progress in the tea industry will ease them out of their jobs. As long as people like a good cup of tea, folk with a keen sense of smell and taste will find their services needed in the tea business. A tea taster can appraise many teas in a few minutes, while the chemical analysis of a single tea is a long and expensive process.

Actual composition of each cup of tea varies with the tea and the method by which it is made. Tannin (which gives tea its briskness and pungency), caffeine (which provides the stimulant), and the essential oil of tea are its chief constituents making for flavor. However, tea leaves are composed of many other substances, too — proteins, carbohydrates, mineral and gummy matters. These components which may add or detract from the flavor of tea are present in such infinitesimal amounts that they are difficult to determine by laboratory method. As the popularity of tea is based primarily on the flavor and aroma of the liquor, to the tea producer it's the taste of his tea that counts.

Tea producers employ tea tasters to blend their teas and to test the quality of their brands. The United States Government also maintains tea examiners in five big ports—New York, Boston, Seattle, San Francisco, and Honolulu. Their job is to see that all teas, from the cheapest to the most costly, are sound, pure, and clean, and do not drop below a minimum standard of quality. Tea tasters' palates are tuned to the standards set for tea by a board of seven tea experts which is appointed each year by the Secretary of Agriculture. Only tea which meets these standards and the regulations of the Federal Tea Act, which is enforced by the Food and Drug Administration, is allowed to be sold in this country for food. Tea officials examined over 91½ million pounds of tea in the fiscal year ending June 30, 1937. This was almost 7,400,000 pounds more than was imported the previous year. Of these millions of pounds examined, less than 1 percent was rejected because it did not measure up to the standards of the Federal Tea Act. Reason for this small percentage of rejections is that importers acquaint themselves with the U. S. standards and see that their tea conforms with them before they ship their products to this country.

Hundreds of different varieties and blends of tea are classified under three general headings: Green or unfermented, oolong or semi-fermented, black or fully fermented tea. The classification depends on the method of manufacturing the green leaves of some variety of the plant *Thea sinensis* (L.) into the product known as tea.

Green, black, or oolong tea can all be made from the leaves of the same plant. However, certain countries and specific districts in certain countries specialize in making one kind of tea. For centuries both China, where the beverage probably originated, and Japan, which developed tea drinking into an aesthetic cult, have manufactured green and black tea. Today our green teas come mainly from these two countries, our oolong tea from China and Formosa, and our black tea mainly from India, Ceylon, and the Netherland Indies. Over 73 percent of the tea examined at United States ports last year was black.

Difference between black and green tea depends on whether the green leaf has been allowed to ferment or not. Though each country has its own special technique in manufacturing, there are four major steps involved in making black tea—withering, rolling, fermenting, and firing. Leaves are first dried until they have lost some of their water content, then they are rolled either by hand or machine until the leaf cells are broken down and the juices are exposed to the air. During the rolling process a chemical change begins to take place in the leaves. Oxidation of the tannin begins and the essential oil of the leaves which gives black tea its aroma is developed. In the fermentation process these two changes are further developed. The leaves are spread on trays or on a conveyor table and left in a moist atmosphere for a few hours. Tea is a bright red tannin color when it comes from the fermentation room, but it turns to the familiar black when fired. Object of firing is to check further fermentation. When tea is removed from the hot, dry atmosphere of the firing room it is ready to be graded and packed for shipping.

In making green tea the leaves are not allowed to wither but are steamed, rolled, and fired. The fermenting process, in which much of the tannin is oxidized, is entirely omitted. As it is the tannin which gives tea its pungency, green teas have a much sharper taste than black. Green varieties have very little aroma. Essential oil which gives tea its odor is developed in the chemical changes which take place during the fermentation process.

Oolong tea is sometimes described as a cross between the green and black, as it has the fine aroma of black tea and the "bite" of green tea. It is prepared in somewhat the same manner as black tea except that fermentation is stopped much sooner.

Jasmine or other "flower teas" are green, black, or oolong tea which has been scented with flowers. After the tea is fired it is spread on containers in alternating layers of flowers and tea, usually three parts by weight of flowers to 100 parts by weight of tea. Flowers and tea are then heated together and later, before packing, the flowers are either left in the tea or sifted out.

Names of tea are often marks of the variety or the country in which it is grown. Thus over 95 percent of the teas shipped to the United States last year were classified as Ceylon, India, Java, Japan, Sumatra, Formosa Oolong, Ping Suey Green, Congou, Japan Dust, Formosa Black, and Japan Black. To tea experts each of these names is associated with a definite flavor. Tea connoisseurs are often as particular about the tea garden from which their tea comes as a wine fancier is of the vineyard where the grapes for his sauterne were raised. Tea grown in the gardens of Darjeeling, for instance, is favored by some tea drinkers over teas grown in the lowlands of India. Some tea drinkers prefer the black teas of China to those of India, and vice versa. Climatic and soil conditions in the season during which the leaves are plucked all affect the quality of the tea.

The evergreen tea plant will grow in many different types of soils and climates, but it flourishes best in an acid soil and in a moist atmosphere. When the plant grows wild it develops into a sturdy bush from 30 to 60 feet high. However, tea planters keep their bushes pruned down to from 3 to 5 feet. A tea bush may live for 50 years, but its prime-of-life span is only about 10 years, during which time it may yield a quarter of a pound of leaf in one season. The season in which the leaf is plucked depends on the locality in which it is grown. In southern India, Ceylon, Java, and Sumatra—localities which are free from frosts and droughts—

Number of leaves plucked from each tea shoot varies in different countries. For Orange Pekoe, however, only the first and second leaves are used.

the plucking of tea leaves is an all-year-around occupation. In colder sections of Japan and China the plants do not put out new leaves during the winter.

Orange Pekoe tea means tea made largely from the first and second leaf of the tea shoot. It is a term to describe the leaf size and is not to be taken as a mark of quality or as the name of a certain kind of tea. Orange Pekoe tea made from the leaves of high-grown bushes, for instance, is likely to be superior in quality to that made from the leaves of low-grown bushes.

Tea experts judge the quality of tea by the appearance, twist, and smell of the dry leaf, by the color, brightness, and odor of the tea infusion, and by the color, thickness, strength, pungency, and flavor of the liquor. They have many terms to describe each aspect of the tea. Appearance of the leaf varies with the kind of tea and method of manufacturing, but in general for black tea the leaf should be small, hard, well-rolled, and uniform. To test the freshness of tea, tea experts take a small handful and crumple it. An old tea when pressed will break and show dust, while a new tea has a spring to it and will not crumble easily.

Color of the infused leaf is a clue to the expert in judging cup quality. In black tea a rich golden leaf means fine tea, while a dark leaf is an indication of low-grade tea. Color of infused leaf of either black or green tea should always be even. Infused leaves of high-grade green tea are greenish yellow or greenish golden. High point in judging quality is the flavor of the tea liquor. According to one tea expert, "the ideal tea is a brisk, full, rich, flavory tea; thick and sirupy in the cup; not dark but rich in color." In describing the liquor, tasters use the word "flavor" to denote a sweetish taste and honey-like smell; the word "brisk" to describe a live as opposed to a flat taste.

Tea carefully measured into a warm porcelain pot, water freshly brought to boil, milk if desired (preferably not cream or sugar)—these are the essential ingredients, tea-wise experts say, of the well-prepared cup of this popular beverage.

Some tea connoisseurs blend their own tea. Most consumers buy their tea in pound or half-pound packages already blended. One can invest as little as 40 cents or as much as $100 in a pound of tea. There are on the market blends to suit every palate and practically every purse. To find the tea that is just right, consumers should turn amateur tea tasters and track down the flavor they like best.

Type of water supply available guides fastidious tea drinkers in their choice of tea. Tea infuses more readily in soft water than in hard water. Small, thick, full tea is very satisfactory for soft water, while for a hard water a brisk, full, flavory tea is a good choice. Though tea should

[Concluded on page 19]

A FORMULA FOR FARMERS AND CONSUMERS

BY HENRY A. WALLACE

Secretary of Agriculture

An Address Delivered in Allentown, Pennsylvania

In this audience I understand there are both farmers and city consumers of farm products. It is a good occasion, therefore, to talk about the community of interest between the farmer and the consumer, between farmers and laboring men, and between farmers and businessmen. In these days when discord seems to be in the air over the entire world, many and loud are the voices striving to drive wedges between the farmers and these other groups. Eastern Pennsylvania, where there has long been a thrifty and stable farm population as well as great industrial activity, is an excellent place to discuss the community of interest between the farmer and the consumer.

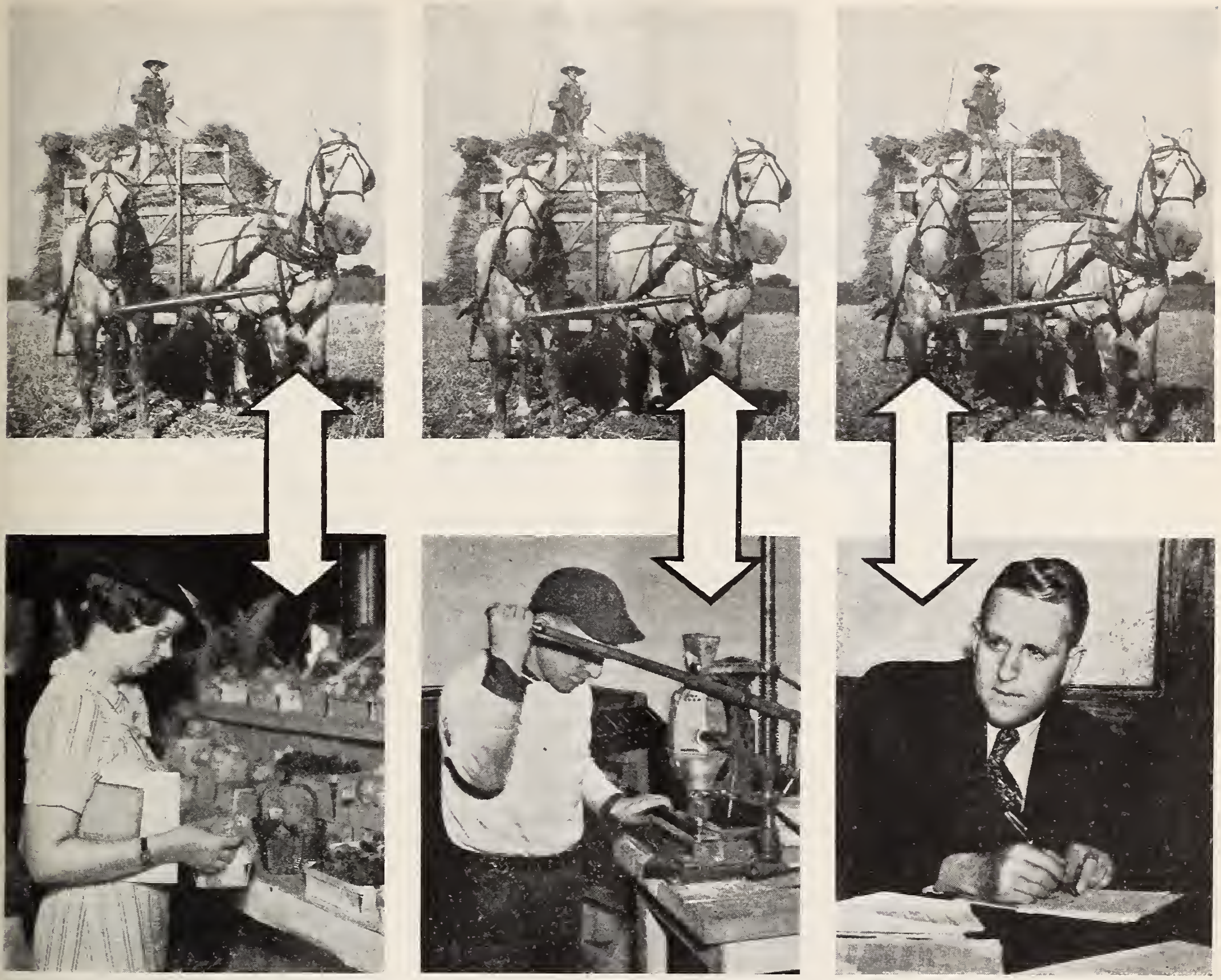
It is easy for people who live in the cities to forget the extent to which their income goes up and down with the income of agriculture. In like manner, it is easy for farmers to forget that their prosperity goes up and down with the pay rolls of labor. For the country as a whole, factory payrolls dropped about 6½ billion dollars between 1929 and 1932. Farm cash income also dropped over 6 billion. Between 1932 and 1937 farm cash income has risen nearly 5 billion dollars and factory payrolls have also risen about 5 billion. This interdependence exists in your State. I find that Pennsylvania experienced a 60-percent decline in factory payrolls between 1929 and 1932, and that farm income declined 46 percent. Since 1932 factory payrolls in Pennsylvania have more than doubled and farm income has also nearly doubled. Pennsylvania farm income for the year 1937 will be about 90 percent of 1929 and her factory payrolls will be about 95 percent of 1929.

The relationship between farm income and labor payrolls emphasizes the ultimate community of interest between farmers and laboring men in a manner which outweighs 100 times over the irritations which farmers occasionally feel with respect to certain types of strikes and which consumers feel with respect to prices of certain food products. Many people like to play up the irritations between the farmer and the consumer, but it is my belief that if farmers and city people are to build the prosperity to which they are entitled here in the United States, they must more and more emphasize their common interest and pay less attention to the irritations.

It is to the interest of the consumer as well as of the farmer that a fair share of the national income should go to agriculture. In the year 1937, I believe that farmers, comprising 25 percent of the population, should be getting around 13 percent of the national income. Actually in 1937, they will probably receive less than 11 percent of the national income. While farmers in 1937 will receive more than twice as much cash income as in 1932, they will nevertheless be short of their fair share in the national income by about a billion dollars.

I am not one of those who believe that the farmers should have the same income in dollars as the nonfarm population. A dollar goes farther on the farm and apparently there are several million people who feel that they would be just as happy with 5 dollars on the farm as with 10 dollars in town.

As a matter of fact, during the 50 years previous to the World War, farmers ordinarily received about 50 percent as much per capita as the gainfully occupied in the nonfarm population. In 1929 they received only about 44 percent as much and in 1932 they received only about 25 percent as much. Today, if we include Government payments, they are back where they were in 1929, but they are not back to the prewar situation. When farmers get 50 percent as much in the way of dollars as the nonfarm population the resulting situation tends to promote a better long-time balance between farm and country than when the proportion falls below 50 percent. If farmers go along indefinitely with 10 to 11 percent of the national income, as was the case in the decade of the twenties and is the case at the present time, the result eventually will be to send so many of the young people from the farm into town that our civilization will become overurbanized. Moreover the

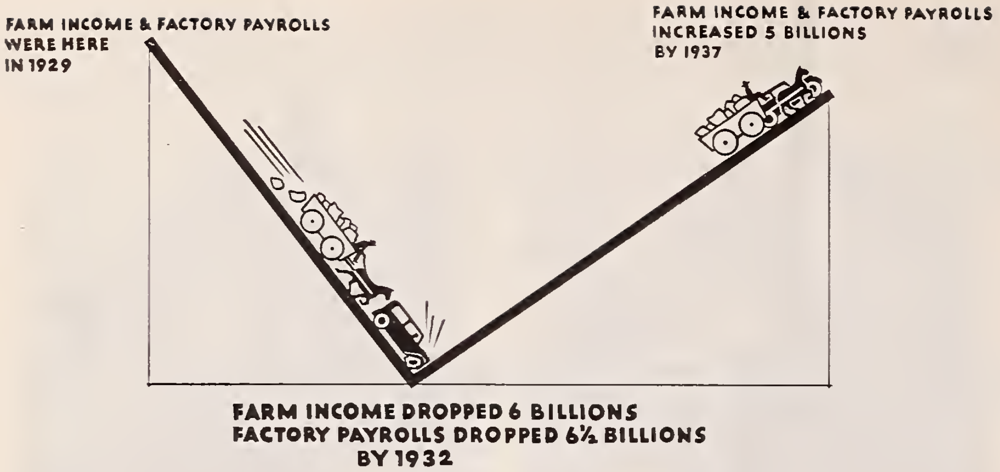


"It is a good occasion to talk about the community of interest between the farmer and the consumer, beween farmers and laboring men, and between farmers and businessmen"

farm people will not have enough income adequately to maintain the soil and the time will eventually come when our city people will have to pay much more for their food than they ought to or than they are paying at the present time.

On the other hand, if farmers, comprising only 25 percent of the population, should get 25 percent of the national income, the people in the towns and cities would have to pay perhaps from 5 to 10 billion dollars a year more to retailers for their food and clothing materials. This would cause genuine hardship among the poorer people in the cities, but the greatest confusion would be among the farmers themselves. If they could be assured of 2 dollars for wheat, a dollar and a half for corn, 30 cents a pound for cotton, and 15 cents a pound for hogs, they would plow every possible acre. With 2 years of ordinary weather, they would swamp the markets of the United States and the world in the same way they did in 1920 and 1921.

I wish to put into the hands of the town and city people of this audience figures which they can use vigorously to convert those who at the present time under a misconception are trying to stir up the consumers against the farmers. Because of the fact that food prices are now much higher than they were in 1932, many people wrongly assume that the consumers of the United States are paying a higher percentage of their income for food than ever before. As a matter of fact, the income of the town and city people during the past 5 years has risen faster than their retail food bill. The retail food bill has gone up about 3 billion dollars, but the in-



come of the town and city people has gone up more than 15 billion dollars. In the year 1937, the cost of food at retail will represent only about 20 percent of the income of town and city consumers which is a smaller percentage than in 1929 or any year since. It is true that some farm products are unusually high in price as a result of the altogether extraordinary droughts of 1934 and 1936, but it is equally true that other farm products are unusually low in price as a result of the very favorable weather this year.

Those who do not see clearly the interdependence between farm and factory have often argued that the rise in food prices from the low levels of 1932 has hurt the consumer. They do not appreciate the fact that as farm and food prices are restored and as farm purchasing power is built up, there is an accompanying recovery in city jobs and weekly earnings which spells general recovery.

We have current records from a group of industries where over 17 million persons are now employed, compared with only 12.7 millions in 1932, and 18.6 in 1929. In 1932 the average wages of those employed in these industries was $1,070. This year there are not only nearly 5 million more employed in these industries, but the average earnings per person have gone up $207. The higher earnings have made possible the payment of about $85 more for the annual food bill, leaving about $122 available for other items in the worker's budget. While average earnings available for nonfood items are this year about 3 percent less than in 1929, living costs other than food are around 15 percent less. This gives the average employed worker a purchasing power about 12 percent greater than in 1929, after paying for the usual quantity of food. This increased purchasing power among farmers and city workers has made possible the 100-percent advance in industrial production since 1932.

Note that I am speaking only of those employed, and that the problem of the unemployed is of a different sort. The chief point of these figures is that in both depression and recovery farmers, workers, consumers, and businessmen have common interests in fuller and continuous employment, greater industrial output, and prices, wages, and profits that are more nearly in fair and stable balance.

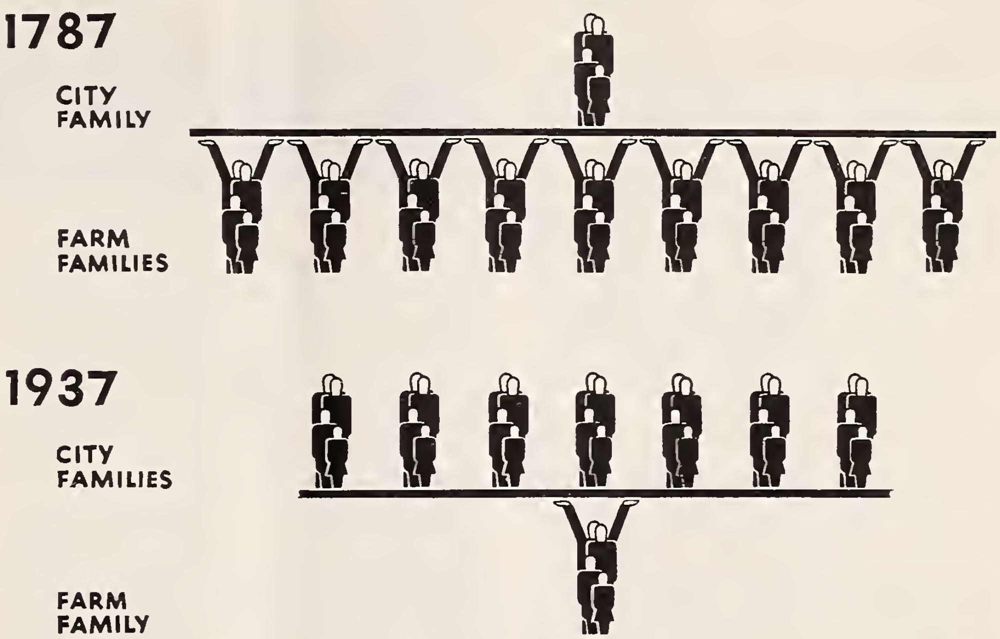
The groundwork for the common interests that have developed between farm and city was laid five generations ago. One hundred and fifty years ago 39 men in the State of Pennsylvania were signing a document designed to promote unity of purpose in order that the various regions might unite in serving the general welfare while, at the same time, preserving democracy. Throughout all the ages to come, I doubt if any group of men can improve much on the spirit with which these 39 men sought to work out a formula for democratically serving the general welfare. Their spirit is good as long as men live together, but the application of their spirit changes from year to year.

Pennsylvania is a totally different State from what it was in 1787 and the problems of the 48 united States are quite different from the 13 struggling Colonies. One hundred and fifty years ago farmers outnumbered the rest of the population 9 to 1, whereas today the town and city people outnumber the farmers 3 to 1. One farm family can feed seven city families today, whereas in the old days it required nine farm families to feed themselves and have enough left to feed one city family.

I am mentioning this because the problem of the farmer and the consumer is so totally different today from what it was when the Constitution was signed. And yet the spirit in which the Founding Fathers approached their problem is identically the spirit which will solve the farm and consumer problem today. It is the spirit by which farmers can attain solidarity of purpose among themselves and by which they and the consumers can cooperate together to serve the general welfare. One hundred and fifty years ago when most food moved less than 50 miles to market, passed through very few hands, and many of the farmers met their customers face to face, the problem was quite different from that of today when most food moves more than 500 miles to market, passes through many hands, and very few farmers see the ultimate consumer face to face.

Consumers have found it necessary to protect their interests by Federal and State pure-food laws and other regulatory measures. Farmers have been forced to protect their interests by State and Federal laws regulating the markets. But thus far the farmers and consumers have

150 Years' Difference in the Number of Farm Families Needed to Feed City Families



"One farm family can feed seven city families today, whereas in the old days it required nine farm families to feed themselves and have enough left over to feed one city family."
—Henry A. Wallace.

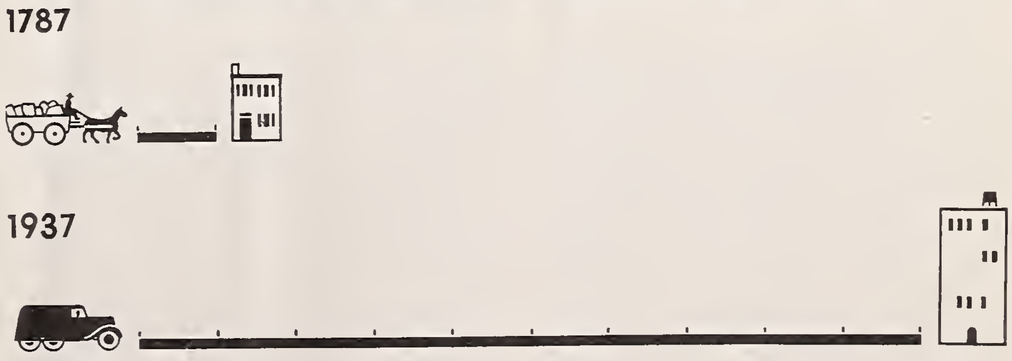
very rarely worked together. Too many people have taken it as a matter of course that farmers wanted higher prices and consumers wanted lower prices and, therefore, the two groups were inevitably antagonistic and beyond reconciling. It seems to me, however, that it will some day be possible to work out a formula which will reconcile the interests of farmers and consumers and give them a unity of purpose in the same way as the Constitution reconciled the interests of the Thirteen States and gave them a unity of purpose.

Both farmers and consumers are interested in an increased balanced output of agricultural products which on the one hand is not so large as to cripple farm purchasing power but, on the other, is not so small as to harm consumers. We know now that those who hold to the philosophy that agricultural production should be steadily increased until the last hungry Chinaman is fed and the last naked Hindu clothed will bring about a situation which, because of the destruction of farm purchasing power, will result in the raggedness and hunger of millions of Americans and positive damage rather than help to the needy Chinese and Hindus.

The bursting bins, the bankrupt farmers, and the ever-lengthening bread lines of 1932 taught farmers and consumers a great lesson. The 1934 and 1936 droughts taught another great lesson. Farmers and consumers are interested not only in farm production; they are also interested in a balanced increased output of industrial products. Farmers from their own selfish point of view should have as much genuine interest in reducing unemployment as the people in the cities. Full employment in the cities means farm prosperity and farm prosperity means full employment in the cities. The problem is to find that state of balance between farmer, consumer, laboring man, and businessman which will result in that type of expanded production which will not end in collapse. If any group violates the principle of balance, there is trouble ahead not only for that group but for all the other groups as well. Balance must be attained by democratic methods. That means education, not indoctrination, but education which has to do with the supply-and-demand facts bearing on the problem of progressive balance.

In any written statement describing the method of obtaining unity of purpose between farmers and consumers, it seems to me, of necessity, there will appear many times such words as "abundance", "security", "balance", and "democracy." How can those consumers who produce goods in the towns and cities be given that incentive to increase their production in a balanced way without bringing on the periodic gluts which stall the economic machine? How can farmers be given a like incentive? The Ever Normal Granary legislation along the general lines as proposed in the last Congress seems to me to be an attack on this problem from the farm point of view. Is it possible for the producers in the towns and cities to take corresponding action with respect to industry in

150 Years' Difference in the Distance of Foods from Markets



Each division stands for 50 miles

order to bring about increasing output and the maximum of industrial security and stability as between the years?

We now have more figures than ever before about production, employment, income, and money. We know the nature of the business cycles better than ever before. The depression of 1930 to 1932 has made farmers, laboring men, and businessmen eager to do everything possible to avoid a repetition of that disaster.

One of the major results of the great depression we have been steadily emerging from ever since 1932 is a fuller appreciation on the part of farmers of their dependence upon consumers and city workers and on the part of city people of their dependence upon sound agricultural conditions. Where formerly farmers and city people saw the points of seeming conflict of interests, many more now understand that adequate prices to farmers are not a detriment to consumers and that adequate wages to city workers are no detriment to farmers as long as both maintain such balance as to make possible an expanding stable production of goods and fuller, more continuous employment.

From time to time I have sought to find a formula that would summarize briefly the basic elements that constitute this fundamental truth of interdependence between farmers, consumers, workers, and businessmen—a formula which when thoroughly understood would lead us all in the single direction of the general welfare irrespective of our individual approaches.

Whether we approach the problem of the general welfare with a primary interest in prices or in wages or in profits, whether we approach it as farmers or consumers, workers or businessmen, there can be no disagreement as to what it is that all of us want. We want food, shelter, clothes, and a large variety of industrial goods, and we want them more abundantly, not only for those who already have but for those who do not.

This means that farmers must continue to produce to meet the fairly constant per-capita needs of a growing population and to devise such mechanisms as will insure themselves and consumers against drought and against destruction of natural resources, of soil, timber, and soil fertility. It means that industrial output must be brought to a much higher level than at present and kept expanding at such a rate as will not lead to booms and depressions.

But if we are to expect producers whether on farms or in cities to fulfill their obligations, prices must be adequate to yield fair profits for continuous output and wages must be adequate for continuous expanding consumption. Obviously, any real progress toward the attainment of these self-evident truths involves a thousand and one problems that cannot be met by a group of farmers alone, or by a group of wage earners alone, or by a group of businessmen alone, or by a group of consumers alone. The apparently conflicting interests of each cannot be brought into harmony by the principle of interdependence unless we utilize in the field of economics, in production and distribution, the democratic processes that have served us so well in building our political institutions. These considerations I have summarized into this brief formula which I trust you will note carefully and ponder over:

Our national goal must be increased balanced production of the things which people really need and want (1) at prices low enough so consumers can buy but high enough so producers can keep on producing; (2) with income so distributed that no one is shut off from participation in consumption, except those who refuse to work; (3) with scrupulous regard for the conservation of our remaining natural resources; and (4) by means characteristic of our traditional democratic processes.

Under the Ever-Normal Granary legislation farmers hope to be able to make their contribution to the fulfillment of the requirements of the formula, but their willingness to work for greater economic stability, and therefore greater social and political stability, must be matched by the appropriate willingness on the part of other groups to cooperate in working out the necessary devices. We may not be able to discover the exact industrial counterpart to the Ever-Normal Granary program, but I am certain that when put to the task our social-minded businessmen and their industrial engineers and economists can find at least the first experimental approach to the right formula and the right mechanisms for action. Consumers, particularly those consumers who are also workers, have a right to expect businessmen to search for that formula and that way toward greater economic welfare and security, just as they have a right to ask farmers to put their production problems in better order.

Farmers and consumers, laborers and businessmen, I am convinced, must work on these economic problems of production, distribution, and economic security in the spirit of interdependence if we are to avoid some of the economic and political difficulties that prevail in many of the countries in the rest of the world.

The darkening clouds in Asia and Europe have made us all eager to avoid any repetition of 1917 with all the horrors that for 20 years have followed in its wake. In times such as these, all constructive-minded people are anxious to find a formula to express unity of purpose in order that sound economic growth be maintained and democracy may live. I have confidence that the farmers and consumers working together can and will find a formula for that unity of purpose.

America's first "model town", is to be wholly cooperative. So runs the news from Greenbelt, Md., the first of three planned communities now being built by the Farm Security Administration — successor to the Resettlement Administration—to provide housing for people of moderate incomes.

Once things are going full blast at Greenbelt, community members will elect a board of directors for Greenbelt Consumer Services, the community co-op that will manage a general store, self-service market, drug store, movie theater, barber shop, beauty parlor, garage, and any other enterprise that a community of 900 families may need.

Since stores must be open for business when Greenbelt's citizens move into their new homes, the Consumer Distribution Corporation has been asked to arrange for the management and operation of the co-op activities. CDC is a non-profit organization created a year ago by Edward A. Filene to help put on its feet a chain of cooperative department stores. CDC will provide working capital for the Greenbelt projects until such time as the community members can take them over.

In this case the Government is at the receiving—not the giving—end, for the stores will be run without Federal subsidy. In fact, the Government will receive a percentage of the gross sales as rent for the properties. Goods will be sold to members at market prices. Profits will be returned to consumers, a certain amount being reserved to build up capital so that members will eventually acquire complete ownership.

Membership in the 550 production credit associations under the Farm Credit Administration has reached a new high with farmer-stockholders numbering about 258,000. Stock in these associations is held by farmer-borrowers to the amount of $11,816,000—a gain of over 1 million dollars in a year. Said Production Credit Commissioner, S. M. Garwood, "The steady growth of these cooperative short-term credit agencies which make loans only on a sound business basis is attested by the continuous increase in the average size of production loans made, indicating the increased participation of large-scale operators."

Back from Antigonish, Nova Scotia, have come the sixty-odd American members of the First Annual Tour of Nova Scotia Co-ops, arranged by the Cooperative League of the United States of America. The trip began with a 3-day conference at Antigonish. Next came a 5-day sight-seeing tour of study circles and cooperative associations in action. Members visited, as well, credit unions, lobster processing factories, fisheries, and mills. Conclusion of the tour came with the regular annual Rural and Industrial Conference of cooperative educational and business delegates held on the grounds of St. Francis Xavier University on August 21. Before disbanding, delegates took steps to assure the success of a similar tour next year. The tour had been operated on a cooperative basis, savings to be returned to members. The members voted to waive their refunds, which came to the substantial sum of $400, and turned over a large part of this amount to a special tour fund.

Skirting close to the 2 million dollar mark, business done during the first 6 months of 1937 by the Consumers' Cooperative Association of North Kansas City, Mo., was the best on its record when sales reached $1,959,000. Growth of CCA has followed two definite policies. Beginning in 1929 with petroleum products, the board of directors has added other items as requirements for the members show that they can be supplied more economically and efficiently by cooperative purchase. When experience proves that additional economies can be made by manufacture, the cooperative has then pushed into that field. First manufacturing effort with lubricating oils was hastened because an outside source of supply proved not to provide oils of dependable quality. Now CCA manufactures, in addition to lubricating oils which it sells abroad and at home, paint, fly spray, grease, and other products, and handles many more which are made to specification for the cooperative. Paint manufacturing equipment installed in the CCA plant early in 1936 was paid for during the first 4 months it was used. Fly spray manufactured by CCA showed a gain of 12 percent in the first half of 1937 over the same months in 1936. A grocery department has been in operation just a little more than a year and a half. Sales in the first half of 1937 were greater than sales for the whole year of 1936. More than 100 items bearing the co-op label are now found on shelves of local cooperative member stores. Co-op labeled foods are packed according to specifications worked out in CCA laboratories. Binder-twine business for the first half of 1937 was 68 percent greater, and tires, tubes, and batteries 9 percent above January to June 1936 sales.

Your Food Supplies & Costs

MEAT prices appear to have hit their post-drought peak and no additional price upswings are in prospect. A gradual increase in meat supplies is expected during the next 12 months, as cattle and hogs fed from this year's large corn crop move to market. Prices are expected to move down to lower levels, particularly after the first of the year. A seasonal decline in pork prices seems probable during the next few months. Beef prices most likely will start their usual downswing during the first half of 1938.

Retail meat prices usually are highest in the late summer and early fall, and lowest in the early winter. A marked decline in supplies of hogs and better grade beef cattle due to the 1934 and 1936 droughts has pushed up prices this summer and fall to high levels. Advances have occurred mainly in the better grades of beef and primarily since June because of extremely small supplies of grain-fed cattle. During September prices of live Choice and Prime cattle at Chicago averaged 80 percent higher than a year ago whereas Medium grade cattle were a third higher. Current prices have topped those prevailing after the 1934 drought because the demand for meat has jumped due to the steady upswing in consumers' incomes underway since 1933.

First decline in average retail meat costs for the country since mid-February occurred during the month ending September 14, when the cost of meats in general went down one-quarter of one percent. In various sections of the country meat prices moved differently. In cities along the Atlantic Seaboard and in the far West they moved upward. Elsewhere they swung down. Sharpest price advances were recorded in New York, Los Angeles, and Boston. Largest decreases occurred in the packing-house centers in the Midwest, Omaha and St. Paul. The small drop in meat costs in general was the result of a drop in pork prices. Beef and lamb prices, on the other hand, stepped up some more, and poultry prices made a marked jump.

Retail food costs in general had been easing off from May until August. Now September reports show a stepup again of one-half of one percent despite lower meat prices. During the month seasonal price advances in eggs and dairy products coupled with a sharp upturn in sugar prices more than balanced lower prices for all other food groups.

On September 14, the index of retail food costs as reported by the Bureau of Labor Statistics was 85.8 percent of the 1923–25 average, and 29 percent above September 1932. Costs were still 21 percent below their September 1929 high point. Compared with a year ago, meat costs are up 14 percent, while fruits and vegetables are 17 percent lower.

Eighteen of the 51 cities reported on showed advances in food costs between mid-August and mid-September. Sharpest gains occurred in New England cities, where the cost of food on September 14 was 5 percent higher than a year ago.

Market supplies of vegetables during the fall and early winter months are expected to be much larger than a year ago, and prices probably will be lower. Celery, sweetpotato, and lettuce production is running about one-sixth larger than in 1936. Onion production is about one-eighth smaller than last year's record crop and the only major crop below the 1936 level.

Potato, onion, and cabbage prices usually reach their low point of the year in October and then advance until new crops mature in the following year. Due to this year's large crops, advances in potato and cabbage prices probably will be smaller than usual. Western onion supplies are much larger than a year ago, while a marked drop has occurred in eastern onions. This situation has caused price increases in the eastern onions. From August 17 to September 14 retail onion and potato prices went down slightly, while cabbage prices moved up. Potato and cabbage prices are about 1.5 cents per pound lower than a year ago, but onion prices are up one-quarter of a cent per pound.

Bargain apple prices are expected to continue through October, when prices hit their season's low point. Prices have dropped sharply since mid-June because of a 70-percent increase in production over 1936. On September 14, apples were retailing at almost half their mid-June level and about 1 cent a pound lower than a year ago. Apple prices generally start moving up in November, with most of the increase beginning in December when supplies start moving out of storage. Due to the large 1937 crop a smaller than usual rise is expected until the high point is reached next summer.

Florida grapefruit and oranges from the 1938 crop are moving to market, and seasonal increases in citrus supplies are expected during the remainder of this year. Grapefruit marketings to date have been smaller than a year ago because of the later maturity of the crop. The higher sugar content required in the fruit shipped this year has resulted in better fruit moving to market. Heaviest grapefruit marketings generally come from January to April, but marketings also are fairly large from October through December. Florida oranges move to market in largest volume from December to February, while March and April are peak months for California navel or winter oranges. Tangerine shipments reach their peak in December, with Florida practically the sole source of supply. From August 17 to September 14 retail orange prices declined slightly, while lemons moved up 1½ cents a dozen. Peak in orange prices probably has been reached, and prices most likely will start moving down as supplies from California and Florida grow.

Turkey and poultry supplies are smaller than a year ago, but larger supplies of "fixin's" are in prospect for the holiday season. This year's turkey crop is one-tenth smaller than the 1936 record production, but probably will be about the same as crops in 1932 and 1933. Turkeys most likely will come to market earlier than a year ago and at heavier weights. About half the turkey crop is expected to move to market during November, leaving less than the usual amount for December and January shipment. Last year's extremely low price caused farmers to hold their turkeys for late marketings. Smaller supplies of fresh poultry indicate that poultry prices as well as turkey prices will be above last year's low level during the holidays.

Increased supplies of cranberries head the list of holiday fixings. A cranberry production one-fourth larger than a year ago is expected. A bumper crop of walnuts and above average pecan crop and the largest almond crop since 1926 are in prospect. Supplies of fruits and vegetables also are expected to be larger than a year ago.

Record production of vegetables for canning is in prospect for 1937. Drought conditions last year damaged crops and curtailed the amount and quality of the canned pack of most important items except tomatoes. This year the reverse has occurred and growing conditions have been very favorable, except in the case of tomatoes. Canning operations should be about completed this month, and final estimates of production should soon be available.

Preliminary estimates indicate that the 1937 pack of canned peas is 40 percent larger than a year ago, while a jump of about 70 percent is indicated for canned corn. Increases of about 30 percent in production are indicated for lima beans, beets, pimientos, and string beans for canning purposes. While the effect of larger supplies will be offset in part by a small carryover from a year ago, prices of canned vegetables most likely will be lower than in 1936. Small price declines have already occurred for most items with the exception of tomato juice and asparagus, which are expected to be above last year's level because of a smaller pack.

A PERSPECTIVE OF FOOD COST CHANGES
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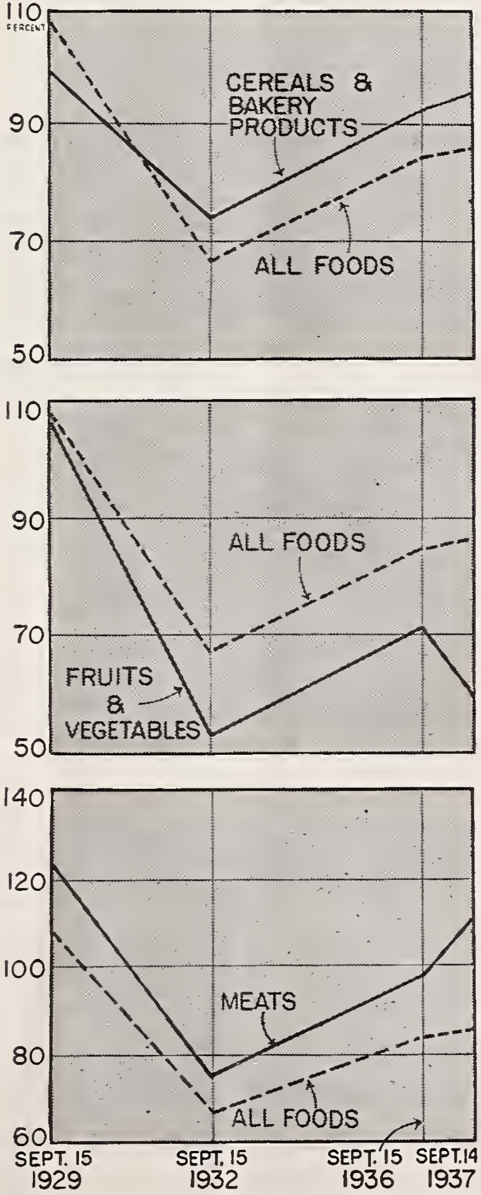

A CLOSE-UP OF FOOD COST CHANGES
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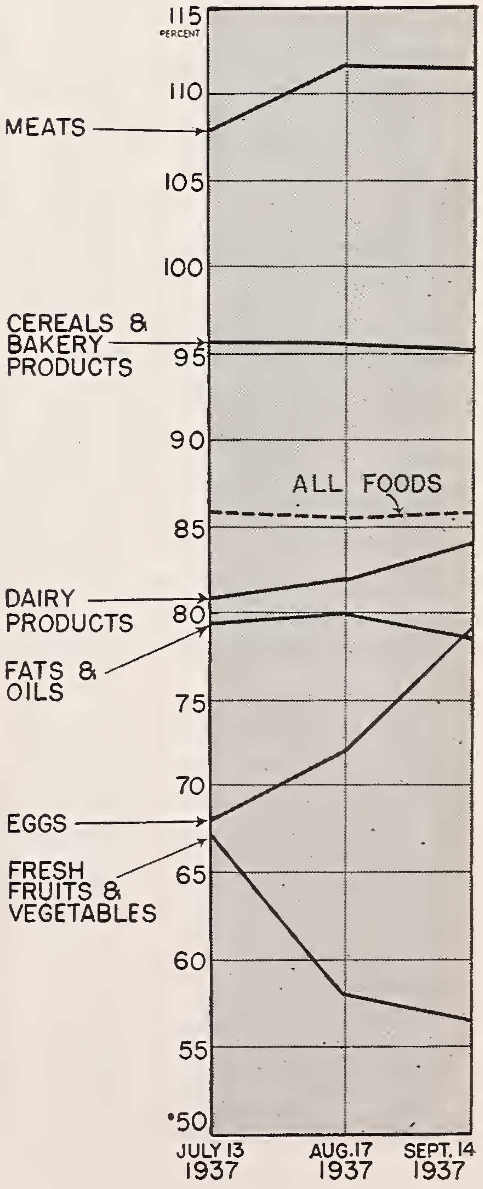

TECHNOLOGY ON THE FARM

[Continued from page 6]

has seen that the farm unit, no matter how large, cannot harvest the monopoly gains that in many cases grow out of consolidation of industrial units. Bankers know that the fixed costs of large units are much higher in agriculture than in industry. Production and prices seesaw perilously. Vagaries of weather and hostile insect pests offer threats to the farmer that the captain of industry does not have to face. Capital has seen these risks send corporation farms to the wall where the farm enterprise built around a family has been able to survive. The family has a tenacious loyalty to the home place that leads it to continue producing even when returns on its labor reach low levels.

Now from the farmers' point of view readjustment toward large units would be downright undesirable. Farmers are no fools and aren't going to part with their holdings until they see ahead some better way of making a living. The depression slammed a gate across the road to urban industrial employment. Already in recent years farms have had to support more people than ever before. In 1935 over 2,000,000 more people were living on farms than had been 5 years earlier. Another 2,000,000 farm youths were staying at home rather than try their luck in cities as they would have in normal times. In 1936 when the farm population resumed the decline of pre-depression years, there was again a slight net movement of people from farms to cities. But there is not yet any certainty as to how many people the cities can take from the farm population and put to work at city jobs.

Talk about farm technology leads easily to the assumption that maximum efficiency is what we want. That is a large assumption. For estimates, say that maximum use of present technologies alone would increase our agricultural output from 25 to 50 percent. This would mean vast unsalable surpluses, for, to quote the report, "agriculture continues to stand face to face with the problem of an increasing potential capacity to produce out of proportion to its capacity to gain outlets for its products. Foreign markets for farm products are not being reopened rapidly. Yet the Nation's farm plant continues to be on a scale capable of sending 12 to 25 percent of its output abroad in years of average crop yields.

"Domestic requirements for farm products remain relatively inelastic. There is doubt whether consumption at present levels of consumers' incomes would increase more than 10 percent even if it were possible to reduce prices of farm products 25 to 50 percent. Domestic consumption of farm products remained relatively stable during the years 1930 to 1933 while farm prices were extremely low. Since food habits are relatively inflexible, it is doubtful that any but the very poor would consume much more as a result of a substantial increase in consumer income."

Altogether, it appears that the family-size farm—long a traditional objective in American agriculture—still has much to recommend it. It has, also, various aids that it can enlist in its competitive struggles. Cooperation is one of these. Already cooperative marketing and buying have made a place for themselves in agriculture. It is probable that they will be of further service to the family-size farm. Already cooperative ownership of farm equipment has brought machinery to the small farm that would ordinarily be out of reach. Cooperative ownership of farm equipment such as threshers, wood-sawing rigs, creameries, grain elevators, and terracing machines offer a big field for expansion of the cooperative principle as an aid to family farming.

Farmer consumer cooperatives have already done a large volume business in the purchase and distribution of production goods such as fertilizers, feeds, twine, gasoline,

STEPPING UP THE OUTPUT

	Around 1880	*Around 1900*	*Around 1930*
WHEAT:			
Man labor per acre:			
Prior to harvest . . . . hours . .	6	5	3
Harvest . . . . hours . .	11	7	4
CORN:			
Man labor per acre:			
Prior to harvest . . . . hours . .	28	22	14
Harvest . . . . hours . .	18	16	12
COTTON:			
Man labor per acre:			
Prior to harvest . . . . hours . .	67	62	48
Harvest . . . . hours . .	52	51	37

Farmers do not and cannot apply at equal rates the products of science and invention. Note how cotton production has slumped behind grain production where efficiency is concerned. This lag is largely due to the fact that cotton has been given less mechanical aid than grain. However, there is no type of agriculture in the United States that does not show some increased efficiency due to technological developments of the last century.

and oil, and this trend seems certain to continue.

Cooperative farm-management associations have sent their experts to small farms to measure labor, feed, machinery, and from their findings to develop programs for better farm production.

To go out of the cooperative field, such institutions as the land-grant colleges, the United States and State Departments of Agriculture carry to small farmers the results of research study which they as individuals would not be able to undertake.

Data piled up in abundance are the working material for forming points of view and for evaluating the social gains or social costs arising from different courses of action. Such data we can gather from individual chapters in the report, each of which deals with one of the fields of technology that has contributed to major changes in agriculture.

It is for consumers to examine such material if they are to have a clearer idea of the farmer problem—a problem with which their own fortunes are closely bound.

TIPS FROM TEA TASTERS

[Concluded from page 9]

have a bright, sparkling appearance when it is poured in the cup, the best quality tea may have a dull-colored liquor if made with alkaline water or water high in iron. In England, where teatime is more of a national institution than in the United States, tea blenders are expected to know the chemical constituents of the water in every part of England. Teas are specially blended for Kent to meet the requirements of its chalky water, while Liverpool, known as the best tea-making place in England, requires a different blend.

Ways of making tea vary in different countries. Some like it weak and some like it strong. Most occidental tea drinkers drink tea for its pleasant and unique taste and its stimulating effect. To their palates the weak brew of the Orient is little more than flavored hot water, while the tea made by the back settlers of Australia, who are perhaps the world's heaviest tea drinkers, is so strong that it has lost all the distinctive characteristics of tea. In certain sections of Australia the custom is to put a lot of tea leaves in a pot and let them stew. English and American tea drinkers prefer to steep their tea leaves in boiling water.

There are many open secrets to preparing a good cup of tea. First, use only freshly boiled water. If water is allowed to boil and reboil, most of the air which it contains is driven off in steam, and the water has a flat taste which is imparted to the tea liquor. A pound of tea averages from 150 to 200 cups, depending on whether you like it strong or weak. Experts say that two-thirds of an ounce of tea to a quart of water is the correct amount. Infusion of leaves should take from 3 to 5 minutes. Tea should be made in a warm teapot—preferably in one made of porcelain—and after infusion the liquor should be poured from the leaves. Worst *faux pas* to commit in making tea is to use leaves a second time. A good cup of tea requires fresh tea leaves.

Drink a cup of tea for anything but food value. Tea has no nutritive value except for the sugar and milk or cream that is added to it.

OUR POINT OF VIEW

The CONSUMERS' GUIDE believes that consumption is the end and purpose of production

To that end the CONSUMERS' GUIDE emphasizes the consumer's right to full and correct information on prices, quality of commodities, and on costs and efficiency of distribution. It aims to aid consumers in making wise and economical purchases by reporting changes in prices and costs of food and farm commodities. It relates these changes to developments in the agricultural and general programs of national recovery. It reports on cooperative efforts which are being made by individuals and groups of consumers to obtain the greatest possible value for their expenditures.

The producer of raw materials—the farmer—is dependent upon the consuming power of the people. Likewise, the consumer depends upon the sustained producing power of agriculture. The common interests of consumers and of agriculture far outweigh diversity of interests.

While the CONSUMERS' GUIDE makes public official data of the Departments of Agriculture, Labor, and Commerce, the point of view expressed in its pages does not necessarily reflect official policy but is a presentation of governmental and nongovernmental measures looking toward the advancement of consumers' interests.

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Tea makes its bid for favor by its flavor, not its food value. Knowing how to buy and how to prepare are prerequisities, connoisseurs warn, to getting full flavor value.

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By Henry A. Wallace, Secretary of Agriculture. An address delivered in Allentown, Pa.

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COOPERATIVE BOOKSHELF

A BIBLIOGRAPHY OF GOVERNMENT PUBLICATIONS ON CONSUMERS' COOPERATION

OFF THE PRESS

This bibliography of government publications on consumers' cooperation brings together material of current use or interest on how, where, and why consumers are going into business for themselves. Students of this movement—which claims an annual business of a half billion dollars—will find this a useful reference guide.

For sale by the
Superintendent of Documents
Washington, D. C.
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VOLUME IV, NUMBER 15 OCTOBER 18, 193

MEAT GRADES AT YOUR SERVICE

CONSUMERS' Guide

Issued every two weeks by the
CONSUMERS' COUNSEL DIVISION
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Vol. IV, No. 15 October 18, 1937

More than a half billion pounds of meat were quality graded by the Federal Government in the year ending with June 30, 1937. Ten years ago there were only about one-tenth as many pounds bearing the Government quality marks. In the first story of this issue we explain what this service means to the householder who wants to make her meat money count in meat values. Official headquarters for Federal meat grading is the Bureau of Agricultural Economics in Washington. This Bureau has stationed its official graders in 21 cities: Baltimore, Boston, Buffalo, Chicago, Cleveland, Columbus (Ohio), Detroit, Kansas City (Missouri), Los Angeles, New York City, Oklahoma City, Omaha, Philadelphia, Phoenix, San Francisco, Seattle, Sioux City, St. Paul, Wheeling, Wichita, and Washington, D. C. Any large dealer in any part of the country can order from the firms that use this grading service. In turn, any retailer can order from these dealers or buy direct from places where graders are located. Retailers usually furnish Government graded and labeled meats when consumers demand them. . . . A handy little reminder to stick in your pocketbook until you learn the grade names by heart is Leaflet No. 122, "U. S. Graded and Stamped Meat", for sale for 5 cents from the Superintendent of Documents, Washington, D. C.

When a leading merchant in Pennsylvania made a canvass of women's organizations throughout his State recently, he found "only two that are not actively engaged in a campaign for more merchandise facts to guide shoppers." This department-store merchant decided it was time to do something about such a widespread demand. He is now requiring that "every vendor tell us what is in the goods he sells us. The buyer will obtain this information and in turn will pass it on to the salespeople, who will be carefully trained to give the information to the customer." Other stores in other cities, too, are becoming consumer-conscious. From such beginnings there is still a long route to the ultimate goal of some consumer organizations which look toward the day when consumers can select goods on the basis of quality standards objectively determined and tested.

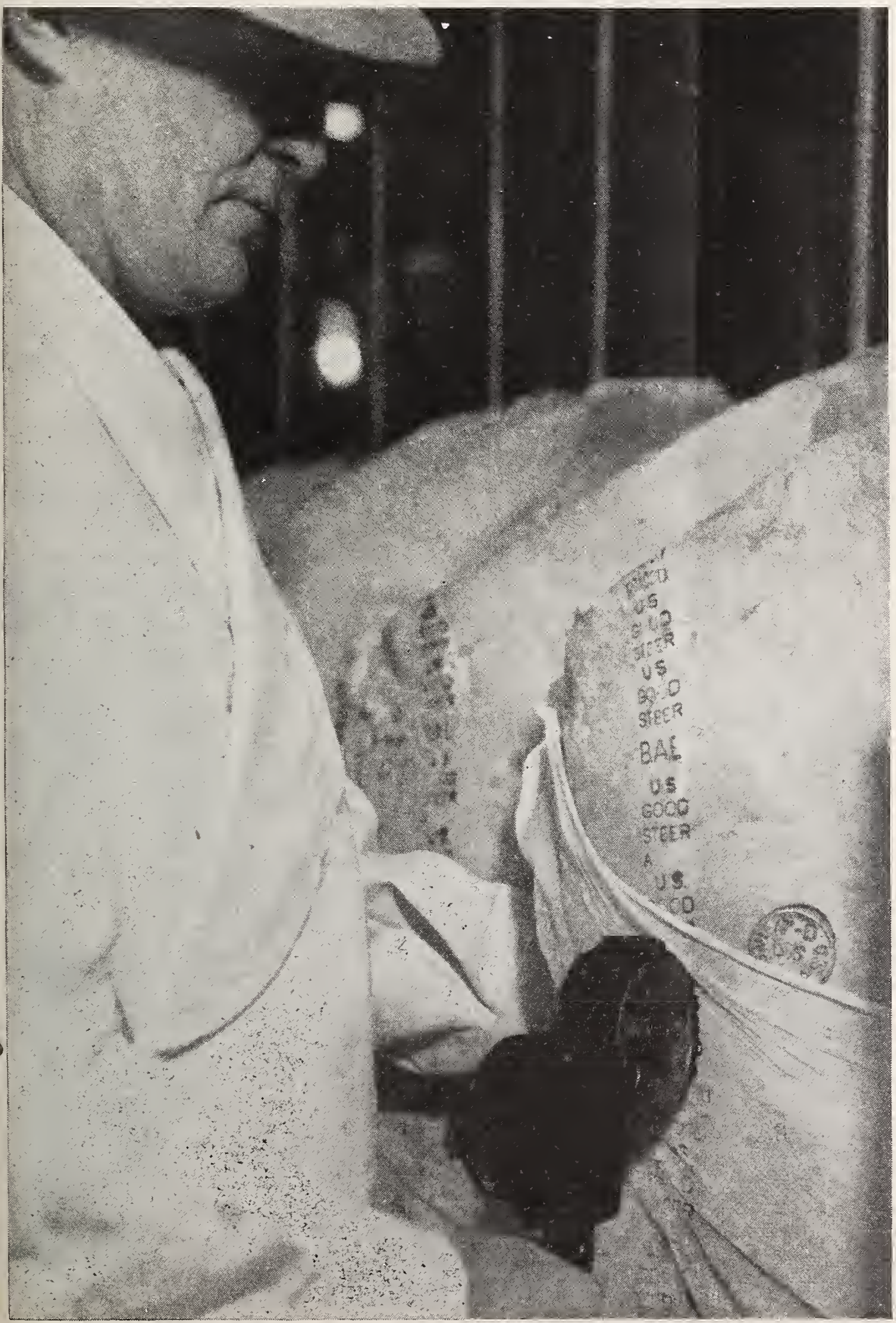
"The technical man in the store laboratory", counselled a specialist from the Mellon Institute when recently addressing a conference on distribution, "should be the consumer's champion. The misuse of a testing laboratory as a publicity gag cannot be condemned too strongly. It is a prostitution of science and a betrayal of the public confidence. Retailers will do well to remember that laboratories are to find facts and not to foment adjectives."

No easy job lies ahead of the technicians and specialists from industry, Government, and consumer organizations who are working toward quality standards through the American Standards Association advisory committee on ultimate consumer goods. For a year this committee has been attempting to lay the foundations for definitions of quality standards for a long list of household commodities purchased by consumers. Its latest report, issued in September, starts off with shoes, "a difficult problem", the committee finds. It will be "some time before definite results can be hoped for on the part of the consumer." As a beginning, the committee plans to develop standards for sizes of children's shoes. Later, standards for quality of uppers, soles, and workmanship will be attempted. (See Consumers' Guide, Sept. 20, for tips on how to buy shoes.) . . . Another important job to be undertaken is standardization of sizes of children's garments and patterns of such garments. These proposed standards will be based on an actual study of body measurements of children in eight selected regions of the country, now being made by the U. S. Bureau of Home Economics and nine cooperating State colleges and universities. How to translate results of this study into useful standards has already been discussed by Home Economics experts with representatives of pattern and garment manufacturers, retailers, and consumers. "A more logical and useful system of sizing for children's garments" is expected to result from the Bureau's work. . . . Recommendations for standards, on the basis of thread count, shrinkage, and size, for five classes of sheets were made and turned over to a group of specialists working out actual standards in this field. . . . Other products on which the advisory committee is concentrating are boys' clothing, gas-burning appliances, household refrigerators, hosiery, bedding, and upholstery.

Louisiana's State Board of Health requires makers and packers of bread to put on the wrapper of each loaf a code mark which will identify the day of the week on which the bread was packed. Before the code mark is used it must be registered with and approved by the Health Board. . . . Knowing how old bread is, is a help. But how about information on what's in the loaf, too?

MEAT GRADES AT YOUR SERVICE

Mrs. Blank's butcher gives her some pointers on how to reduce the guessing on quality in the meats she buys



Mrs. Blank wore that faintly anxious look which often marks the moment when the family carver first applies the knife to the roast. Would the beef be tender? Would it be full-flavored and "just right?"

She received her plate, scanning critically the slice of beef upon it. After all, this was the substantial foundation upon which a good dinner is built. Such a meal is no better than its meat!

Mrs. B. tasted the beef with all the critical regard of a good cook. It was fair. But only fair. Why, on this particular occasion, when she had gone to such pains to try to get a really excellent roast, couldn't it have been just that? It wasn't bad; neither was it remarkably good.

Now this was a somewhat special occasion. There were other times when Mrs. B. was not accustomed to shop for the best roast of beef on the market. The Blank family lives like millions of other American families. For most ordinary dinners Mrs. Blank tries to buy meat thriftily—looking for reasonably good quality at not too high a price. But this was one time when she wanted and thought she had paid for the best.

Why was a roast of beef such a gamble? Couldn't one find a way to reduce the risk of getting just

"U. S. Good Steer" is the grade the Department of Agriculture expert is marking on this quarter of beef. When the beef is cut up by the butcher, each piece shows grade mark.

average quality meat when you think you're getting tops and are willing to pay for it? Must every housewife be as expert as the meat salesman, simply in order to get the quality of meat she thinks she's paying for?

As it happened, Mrs. B. learned not long afterward that her Government was trying to help her answer some of those questions. She had changed most of her meat buying to another store, and it was here that the manager first told her about the beef that had been graded for quality by the Federal Government.

She was interested at once. Here was something that she had not known about. Something that sounded as though it might be on the right track.

The meat manager showed her a loin of beef on which was stamped a long ribbon of words in purple ink, repeating over and over, "U. S. Good Steer." All the way down the back ran that purple legend so that virtually any cut out of that quarter of beef would show those significant words, "U. S. Good Steer."

"So that is the grade of the beef, is it?" asked Mrs. B.

"Yes, Mrs. B.", answered the meat man, "that is the grade stamped there by the Government grade expert. And of course it goes without saying that the Government man has no personal interest in the meat. He is like an impartial umpire. He judges its quality to the best of his trained ability and according to standards set up by the Government, and labels it. From there on the meat sells for just the grade which that stamp says it is."

Another stamp on the meat caught Mrs. B.'s eye—a little purple circle within which were a couple of numbers and the words, somewhat abbreviated, "U. S. Inspected and Passed."

"Is that something about the grade of the meat, too?"

"No, ma'am", answered the meat man. "Don't confuse that little round stamp with the grade stamp. That little circle is a Government stamp, too, but it shows that the meat was inspected and is free from disease. Meat slaughtered in most packing plants carries that little circular stamp, but that hasn't anything to do with this matter of grade that I am talking about. Don't let anyone fool you by telling you that the round circle shows the grade of the meat. It doesn't, as you can see by reading it."

"So there may be more than one kind of purple stamp mark on the meat?"

"Well, the circle is always there when the meat is prepared under Federal inspection. That passes it as disease-free and wholesome. But let's disregard that for the moment. What I am talking about is this stamp with the words 'U. S. Good Steer.' This is the one that shows the grade of the meat. Also what class of animal it came from. It shows that it came from a steer and that it falls within the grade called 'Good.' "

"Suppose it didn't come from a steer, what would it come from?"

"The grade stamp also tells whether the meat is from a steer, heifer, cow, or bull. As you probably know, a properly fed steer produces the very finest beef; but a well-fed heifer makes excellent beef, too. Some of the lower grades might come from a cow or bull."

"So it is a good idea to notice which kind of animal the beef came from as well as the grade of the beef?"

"Yes; that often cuts some figure in the quality of meat."

"But now about this grade business; is 'Good' the highest grade?"

"Not exactly the highest. The Government has seven grades for beef. The highest one is called 'Prime.' Then the next best grade is 'Choice.' Then the next one is this that you are looking at, 'Good.' Then the next four grades in order are 'Medium', 'Plain', 'Cutter', and 'Low Cutter.' You won't see those lower grades for sale in this market."

"Wait a minute! Let me get this

"Certificate of Quality, U. S. No. 1 Grade", reads the little round cardboard label tied to this sausage, bologna, and package of frankfurters. Ham, bacon, and other manufactured meats may also receive this quality grade from Government graders.

straight. Tell me those better grades again."

"'Prime' is the highest. Then come 'Choice', 'Good', and 'Medium' in that order. I should say you had better forget about the lower grades. Remember Prime, Choice, Good, and Medium. Those are the grades we handle and they are the ones you will want to buy."

"Probably I won't be able to remember which grade is which the next time I come in. You ought to have a card hanging up here telling the names of these grades and what each means."

"Yes, that would be a good idea. Still, I think you will remember them better than you think, once you get the habit of looking for this Government grade stamp on the meat."

"I am certainly going to look for it hereafter. But I wish you would tell me a little more about these grades. Just what does each one mean anyhow? Which would I want to buy at different times—and why?"

"Prime comes from steers or from the very finest heifers, never from cows or bulls. It is said that only about 1 percent of all cattle fall within the Prime grade. It is the cream of the crop. It means steers are bred for beef, and grain-fed for a long period. It means that the color, grain, and texture of the flesh, the color and structure of the bone, the color and arrangement of the fat are such that the meat should be of top quality. Prime beef doesn't sell much in the ordinary stores; but some of the best markets sell it. Much of it goes to the fine hotels, restaurants, clubs, and the like."

"Then the next grade is Choice, you said?"

"That's right. Choice is the top grade we handle, and it is good enough for anyone!"

"And what kind of cattle does the Choice beef come from?"

"Only from very well-fed steers or heifers. And only from cattle bred for fine beef conformation; that is, bred for the bodily form that gives the largest percentage of fine cuts with greatest economy in cutting. It means that you get more lean meat in proportion to the amount of bone in the retail cut. Also that it is fine quality meat with fat of the right amount and well marbled through the tissues. You ask for 'U. S. Choice' grade the next time you want a really good oven roast or a Porterhouse steak. You can pay your money for that kind of meat and you stand a much better chance of getting something very satisfactory than if you buy without regard to a grade mark."

"Indeed, it sounds good. But perhaps I won't be in the market for the higher-priced beef grades the next time I come in. I wish you would tell me a little more about those lower grades."

"Certainly. The next lower grade is this one you are looking at now, 'U. S. Good.' It looks good, too, doesn't it? It is splendid meat. This is what I usually take home myself. It doesn't sell at quite as high a price as Choice and gives you good value for your money."

"Tell me a little about this grade, please."

"This Good grade comes from what I might call the less finished type of grain-fed cattle and some from the highest types of grass-fed cattle. You understand that in general cattle do not fatten on grass as well as they do on corn. But some grass-fed cattle are good enough to get into this grade."

"The Good beef carries less fat than the Choice?"

"Yes, less fat. But it carries a fair amount of fat. You will see a limited amount of marbling."

"By the way, is this what you call marbling, these lines of fat meandering around through the lean meat?"

"Yes, that is what meat men call marbling. You notice there is a certain amount of it in this beef. In general, the Good grade means beef reasonably young and tender. No one need hesitate to buy the Good grade for ordinary family meals."

The "U. S. Prime Fowl" tag on dressed chicken means it has been judged first quality by official graders.

"And what did you say the next lower grade is? Prime, Choice, Good, then—let me see—Medium? Was that what you said?"

"That's right. The next one down is Medium. Now the Medium grade gets down to where you can economize. This is the beef to save money on when you want to, with pot roasts, stews, and so forth. Properly cooked, this meat is worth what it costs. Remember, I am not advising this for oven roasts and steaks for your special dinners. This is meat at a lower price. You have to take account of the lower price when you are figuring what this Medium grade is worth on your table.

"This isn't from the best-fed steers and doesn't carry much fat. You won't see much marbling in this cut. But this will save you money on your pot roasts and stews—on the so-called moist cooking. That is about the story for the Medium grade."

"Well, this is very interesting. Now are you going to tell me about the still lower grades?"

"No, madam, I don't believe I will. At least not this time. I am afraid it would only confuse you. You probably won't see any of those lower grades in the stores or markets around here, anyway. If you will remember especially those three grades—Choice, Good, and Medium—you can buy your beef to fit the needs of both your table and your purse on every occasion."

Mrs. B's eye wandered down the showcase filled with attractive cuts of many kinds.

"And does the Government grade other kinds of meat than beef?" she asked.

"Yes", responded the meat man, "they do the same sort of grading on veal and lamb and various manufactured products."

"And are the grades on veal and lamb the same as those on the beef?"

"Practically the same. Just as I told you in the case of beef, if you will remember about the three grades, you won't have any trouble buying veal or lamb no matter what the occasion or what price you want to pay, and in the case of these meats you don't have to bother about the class."

"You spoke about manufactured products. Do you mean sausage and that sort of thing?"

"Yes, sausage, frankfurters, bologna, hams, bacon, and all those manufactured meats. They do the grading on a rather different basis in this case, however. The Government grader takes account of a number of different qualities in those products—such things as color, firmness, composition, texture, flavor, condition, aroma, uniformity, and I don't know what else. If all these things measure up to the top standard set by the Government, the meat is graded as U. S. No. 1. That is the only grade the Government has been requested to certify so far. If the ham or bacon or sausage isn't good enough to be graded No. 1, it simply doesn't get a U. S. No. 1 Certificate of Quality.

"Of course you remember that all meat from Federally inspected plants must have the little circular stamp showing it to be disease free. Also many of these prepared products have stamps showing private trade names or terms of various sorts. But all that has nothing to do with the particular thing we are talking about. What we are talking about is the certificate of grade or quality.

"With this kind of product you look for something a little different. Instead of that long ribbon of purple words stamped on the meat, the Government grader ties a little round cardboard label to the meat or the same label may be printed or stamped on the container. On this little round label are printed the words 'Certificate of Quality' and underneath that, 'U. S. No. 1 Grade.' The tag may also show what packer made it, the date of grading, and so on."

The meat man reached in the showcase and drew out a package of sausage on which was printed the little round label.

"This sausage, for instance," he said, "is U. S. No. 1 grade. Of course some people like a lot of sage in their pork sausage or a lot of pepper in some other kinds. Others don't like these things at all. This grade label doesn't settle the question of taste but it does mean that as carefully as can be judged, in this package you have a product of general excellence."

"So then there isn't any choice of lower grades at cheaper prices with these products?" asked Mrs. B.

"The Government service is not compulsory, and so far it has never been asked to certify lower grades on this type of meat. This, you see, is entirely a grade for excellence. If you want to shop for something different, you are on your own as far as the Government stamp is concerned."

[Concluded on page 19]

"Marbling" is the name given to the white lines of fat which run all through fine quality beef. Tender beef is usually well marbled.

Both the yellow flesh near the stone and the greenish flesh near the rind of an avocado make good eating.

A Luxury Fruit Turns Plebeian

Once a decorative note in the fancy fruiterer's, avocados now find their way to chain-store counters and make their claim on planners of more moderate priced menus

A NEW plant appearing on American window sills, vying with ferns, geraniums, begonias, and rubber trees, is the young avocado tree, grown from the seed of the fruit used for a family salad. Though the seed of the avocado may sprout in a red clay flower pot and grow into a decorative plant, if it is to develop into a full size tree bearing luscious fruit, it is much more particular about its habitat. But both the large seed and the delicious flesh of this tropical fruit intrigue the American housewife. Over 20 million pounds of the fruit was eaten in this country in 1935.

Until recently the avocado was known as a luxury food in the United States, appearing as a salad de luxe on hotel menus and served in the average home only as an extra special delicacy. Reason was the usual one—cost. The first avocados grown commercially in this country sold as high as a dollar or more apiece. Today with large orchards in Florida and California, with shipments of fruits sent from Cuba and Mexico, the avocado has taken a nose dive in price.

"Nutty" taste of the avocado, unlike that of any of our more familiar fruits, is still strange to many American palates. In Mexico and Central America, the aguacate—the Spanish name for the avocado tree—is a familiar landmark. As elms and maples tower over the cottages of New England, aguacate trees guard the entrance of many a Mexican home.

"Tortillas and avocados", say the natives, "make good eating." Nutritionists nod their heads in assent, especially as to the good eating qualities of the avocados. The buttery flesh of the avocado is richer in oil than any other fruit except the olive; it contains some proteins and is a fair source of minerals. It also makes a showing of vitamin virtues. Most varieties of avocados contain vitamins A, B, D, E, and G. Some even run the gamut of the vitamin alphabet and add a small quantity of C to the list. Doctors often prescribe avocados as an A-1 food for diabetic patients who must have a diet with a minimum carbohydrate content. Avocados contain no starch and less than 1 percent of the fruit is sugar, yet, because of its generous supply of oil, it is a filling food, high in calories. The oil content of an avocado varies from 7 to 26 percent, depending on the variety. Caloric value depends on oil content. One-fourth to a half of a medium size avocado usually averages 100 calories. Composition of avocado oil is similar to that of olive oil. In digestibility, avocado oil is rated with butter fat.

Because of their texture and flavor, avocados combine well with acid fruits and vegetables such as oranges, grapefruit, and tomatoes, or they are good served "on the half-shell" with a little salt, lime or lemon juice, or with a peppy French dressing. Real devotees of the avocado use them as a flavoring for ice cream, a sandwich spread, or addenda to soups, consommés, and omelets. Avocados are generally eaten fresh. Cooking detracts from their flavor and gives them a bitter taste. As yet no method has been devised for canning them.

Popular name for the avocado is "alligator pear." Scientists frown on this term, calling it a misnomer. The avocado is not even a distant relation of the pear family. Together with the cinnamon, sassafras, and camphor, it belongs to the laurel clan and is a tropical and subtropical evergreen plant indigenous to Mexico and Central America. Due to the popularity of its fruit, the tree is now cultivated in many countries, among them Hawaii, Cuba, Australia, South Africa, southern France and Spain, in the northern half of South America, in Central America, Mexico, and in Florida and California in the United States.

Spanish adventurers, shortly after their conquest of the New World, are credited with bringing the first avocado seedlings to Florida. Since the turn of the twentieth century the United States Department of Agriculture has studied the life habits of the avocado. Government plant explorers have wandered through Central America, Peru, Ecuador, Chile, Mexico, and the West Indies for types of the fruit best adapted to Florida and California climates. The first commercial grove was started in Florida about 1900; in California in 1910. Today there are about 8,000 acres of avocado orchards in California and about 2,500 acres in Florida. As the crop at home and abroad matures at different seasons, the avocado, especially in the markets of large cities, is available the year round. California ships her crop in winter and spring, Florida in summer and fall. Cuba's avocados ripen in July, August, and September. In the year ending July 30, 1937, Cuba sent us 9,084,000 pounds of the fruit.

There are over 400 varieties of avocados, which vary greatly in size, shape, color, and texture of skin, flavor, and nutritive value. Mature avocados, depending on the variety, range in weight from 6 ounces to 3 pounds. The shape may be round, ovoid, or bottleneck; the skin may be thick or thin, smooth or rough. Color varies with species, ranging through shades of green, purple, maroon, and dark mahogany. Shape, color, and texture of skin have little relation to eating quality. Goodness is dependent primarily on maturity of fruit and high oil content.

Hundreds of varieties of avocados are conveniently grouped into three races—Mexican, Guatemalan, and West Indian. Varieties of all races are cultivated in this country. Fruits of the Mexican are, as a rule, thin-skinned fruit averaging about 8 ounces. Though the fruit has a delicious flavor, because of its small size and tendency to bruise easily it is not cultivated commercially in this country. General characteristics of the Guatemalan varieties are thick, rough, shell-like skins in shades of dark green, red, and bronze. Popular variety with the California growers is the "Fuerte", a hybrid between the Guatemalan and Mexican races. The Fuerte is a fruit weighing from one-half to one pound, is of an attractive light green color, has a high oil content, and excellent flavor. The Fuerte is much more resistant to cold than many other varieties. Most sensitive to frost are the West Indian varieties of avocados, cultivated more in Florida at the present time than in California. The skin of the fruit is always smooth and leathery, and in green skinned varieties is always a yellowish green rather than a dark green.

Like the orange and lemon, all varieties of avocado want a climate free from frosts and from intense heat waves. Refusing to live with its roots deep in water or in parched

Avocados filled with citrus fruits and "pepped up" with a snappy salad dressing make a colorful and delicious salad.

earth, the avocado demands a moist soil with good drainage. The hard but brittle wood of the trees snaps easily in angry storms. If an orchard is to have a long life, it must be situated in a spot protected from sweeping winds. Granted that an orchard has perfect soil and climatic conditions, it demands from its caretakers constant protection against insects and blights.

In blossoming season the tree is a yellowish, greenish mass of flowers, but only a small percentage of its profuse blossoms bear fruit. The yield depends largely on variety, soil, and climatic conditions and the size of the crop the previous year. A good yield per tree in a well-cared-for, well-situated orchard is from 3 to 5 crates of fruit a year. Prices which growers receive for their crop vary with varieties grown and season of shipment. Growers' returns usually range from 2 to 15 cents a pound. According to studies made of Florida avocado orchards, the average cost of maintaining a grove in good condition ranges from $75 to $100 an acre a year.

Problems aplenty plague growers of this fragile fruit. One of them is knowing the exact moment when it should be picked. Unlike most fruits, the avocado hangs out few signals that picking time has come. As maturity approaches, only slight changes in the color of the skin and stem appear as a warning to growers to get on the job. Nor does the softness of the fruit give the tip-off, because avocados do not soften on the tree. Calendars are little guide, either, since the ripening age of one variety may change from season to season. Yet knowing just when to pick is a prime prerequisite to getting best values—in money for growers, in flavor for consumers. As the fruit matures, its fat content increases, and the richer in fat the better in flavor are avocados. Immature ones have a watery, insipid taste. Overripe avocados rate black marks, too, because they are apt to be rancid and unpalatable. Spotting the moment when the fat content is at its best is a tricky business. The surest test is a laboratory one, but obviously growers cannot rush off to laboratories to decide the matter for them on every and all occasions.

Great care must be taken, too, in picking avocados. Each fruit is clipped from the tree and is carefully handled so that it will not bruise. Usually pickers are equipped with canvas bags or buckets lined with excelsior. When the fruit is gathered, it is then taken directly to the sheds for grading and packing. Most fruits taste best when fresh-picked, but the avocado requires 10 or 12 days' respite to "soften up" before it makes good eating.

For marketing their crops the growers of California and Florida have organized cooperative associations. Organizations in each State have carried on research work studying the idiosyncrasies of the avocado and breeding hardy varieties which will rate high in flavor and withstand long distance shipping. They also advise growers on the best methods of fertilizing, spraying, and general grove care. Both cooperatives have made an attempt to standardize grades and packing methods, to regulate movement of the crop to market, and to advertise their product, which they hope in time will be as common in the American fruit basket as the tropical banana.

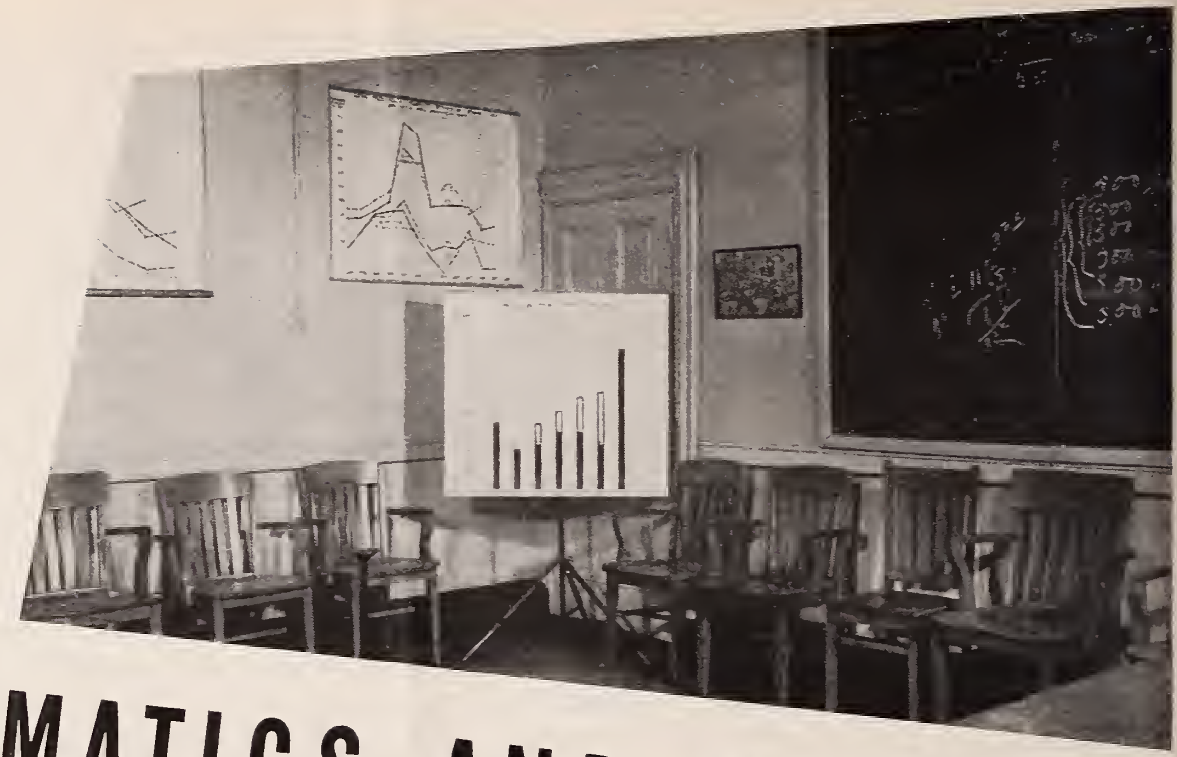
No Government grades are established for the fruit, but ambitious growers have established their own grades. Fruit from California which has an oil content of at least 8 percent and measures up to the top grade in keeping and shipping qualities and general marketability are stamped "Calavo." "Flavocado" is the trade name stamped on fine-quality avocados marketed through the Florida Avocado Growers Exchange.

Consumers' preference in avocado varies in different sections of the country, but predominant choice seems to be for the medium half-pound to pound size fruit, green in color, and with a fairly smooth or pebbled skin. Appearance evidently accounts for preference, as size, texture, and color of skin reveal little as to quality of fruit. Avocados are best for eating when the flesh is soft and yellowish or yellowish green in color. Texture of flesh should be butterlike. Avocados which do not have this buttery texture are apt to have a flat, watery taste. "Mushiness" is characteristic of the flesh of overripe fruit. Pressing a fruit gently will give some indication of its ripeness. Thin skinned varieties yield readily when the flesh is soft; thick skinned types yield slightly. Fruit with dark, sunken spots and broken skins should be avoided. Both are indications of potential decay. The seed of the fruit is always fairly large, but it should make up less than a fifth of the total weight.

If an avocado needs a little more time to soften before serving, place it on a shelf in a room at normal temperature. Refrigeration retards softening. To hasten the ripening process, wrap the fruit in a cloth for as long as necessary. The flesh of an avocado that is just right for a salad will stay bright for an hour or so, but in time it is bound to darken. No more of the flesh should be peeled than is to be used for one meal. The remainder should be put in the icebox, but never directly on the ice or near the ice coils.

"It is only by divesting our minds of questions of ownership and other machinery of distribution, and by looking solely at the question of consumption—asking ourselves what is the annual product, who consumes it, and what changes would or could we make—that we can keep in the world of realities."

Justice Oliver Wendell Holmes.



Major job of cooperatives is to get favorable prices for their members. Trends in production, sales, and market conditions are closely studied in determining cooperative policies. Here is the conference bargaining room of one cooperative.

MATHEMATICS AND MILK

Toughest of milk problems—for many farmers and most consumers—are current devices for paying farmers for this basic food. In this fourth of our series on "Milk for Millions" we dissect typical payment plans *

CONSUMERS buying milk in the city do not have to be mathematicians to figure out what a quart of milk costs them. Few farmers know when they sell that milk how much it will bring them. Even when the check comes in, they often think higher mathematics is child's play compared with the computations involved in figuring out the price they receive.

One prime fact complicating farm prices is that consumers do not want all the product of dairy farmers to come to them as fluid milk. They want, in addition to fluid milk, cream and a lot of manufactured dairy products—butter, cheese, evaporated milk, ice cream, and such foods.

Second complicating factor behind farm prices for milk is that producing milk for bottling is a more expensive business than producing milk for manufacturing, as we pointed out in our last milk story (CONSUMERS' GUIDE, Sept. 6, 1937). In addition to the economic pressures pushing the price of milk for fluid uses in local markets up above the price of milk utilized in other ways, there have come about various kinds of more or less efficient human control of this price. Absence of human control plus economic reasons, on the other hand, tend to keep the price of milk for manufacturing purposes down to a lower level. These contrary pressures we discussed previously.

Comes a third complication. If dairy farmers located in expensive producing areas could produce just enough to meet consumers' day-to-day demands for *fluid* milk, the problem of their prices would be relatively simple. But such a neat and tidy arrangement is not possible, or at least has not yet been discovered. Daily and seasonal fluctuations occur in the supply of milk that farmers serving a city bring to market. Consumers' demands, too, vary. To meet maximum consumer demand for fluid milk, each city usually requires a certain amount of "surplus" milk, normally around 10 to 15 percent of the fluid milk and cream sales. Any "surplus" greater than the amount needed to insure consumers with their fluid milk needs the year around is an economic embarrassment. Such milk must be converted into manufactured dairy products at a price level established by the most cheaply produced milk in the country.

Fourth complicating fact behind farmers' prices, growing out of these other considerations, is that most farmers serving city consumers get

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* *Previous chapters of this series appeared in the August 9, August 23, and September 6, 1937, issues of the Consumers' Guide.*

Half of the fluid milk and cream city people consume is marketed through farmers' bargaining cooperatives. The man in the white overalls, representative of one such co-op, is inspecting a member's equipment.

paid many prices for the one product, fluid milk. Even when some of them are paid a single price, called generally a "flat" price, the uses to which the milk is to be put are considered in that quotation.

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To Farmer Jones outside of Philadelphia, with his head in the flank of his cow, it may seem strange that part of the milk flowing into his pail will fetch, say, 6 cents a quart while the rest brings lower prices. It's all the same milk, from the same cow, produced in the same way from day to day. But when his milk has eventually to be sold in competition not only with other expensively produced milk but with the products made from inexpensively produced milk, the dealer who buys his product is bound to pay him a price or prices which reflect this fact. So has grown up a variety of systems of payment of "class prices." Under these "class price" systems farmers get their highest price for the milk which dealers later sell to consumers as fluid milk (often called "Class I"); they usually get a lower price for milk going into fluid cream ("Class II"); milk used in manufacturing brings still lower prices ("Class III", etc.). Classifications may vary in different markets. In some cities milk has been classified in as many as six groups.

Losses sustained by Farmer Jones on the sale of milk for manufacturing must be counterbalanced by the price he receives for milk used in fluid channels, in order to keep him in the business of supplying fresh fluid milk to the city.

Price difficulties of farmers nearly all center around this problem of the relation of fluid to "surplus" milk prices. If the price for fluid milk is much more than adequate to cover the additional costs of its production, other farmers are encouraged to produce milk for the more attractive fluid market. If more milk, expensively produced, comes into the city and no additional inducements are made to consumers to increase their consumption, the additional milk is forced into the low return manufacturing channels. The average price to the farmer for all his production is thus lowered. Farmers then naturally press for a higher price on milk used for fluid purposes. If they are able to force up this price, the spread between fluid milk and "surplus" prices is further increased. As the price to farmers for "Class I" milk goes up, the price charged to consumers for a quart usually follows suit. Higher consumer prices in turn reduce consumption, still further creating surpluses.

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Such pressures set the stage for dealers who buy from producers at slightly more than the average price and sell the major portion of their milk to consumers at slightly lower prices than other distributors are charging. When such competition becomes sharp, other dealers then lower their prices to consumers for bottled milk and to farmers for Class I milk. The price war does not subside until a sufficient number of participants has been eliminated or, more frequently, until prices have gone so low that too many farmers have been eliminated. To avoid shortages of milk for bottling, the spread between the manufactured price and the fluid price must again begin to expand.

Nobody knows exactly what is the most satisfactory spread between these two prices for all markets and for all farmers. What is the right figure in one market may be too high in another or too low in a third. Costs vary greatly from market to market. Milk is shipped into some markets from points as far away as 300 or 400 miles, while in others it comes from farms less than 40 miles distant from a city. Sanitary regulations in some cities impose heavy costs on farmers and in others relatively little expense. Costs of producing an even supply of milk throughout the year are higher in some areas than in others.

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Class price schemes, or "utilization price" plans as they are sometimes called, operate in practically every milk market where farmers are organized cooperatively. Records of the Cooperative Division of the Farm Credit Administration indicate that about half of the fluid milk and cream consumed by city people is marketed through these bargaining cooperatives. Some of these cooperative organizations act like a labor union whose officials bargain for the best possible price they can get from the bosses. Some actually take title to their members' milk and manufacture a part of it in plants cooperatively owned or operated. Except for these and a few which own and operate retail distributing units, selling fluid milk and cream directly to consumers, milk co-ops are really bargaining associations.

Usually class price schemes work in one of three ways: A distributor deals directly with the farmers from whom he buys; a group of distributors deals with its farmers through a cooperative pool; or all the distributors of the city pay into a Government controlled pool which in turn pays out to farmers. The principle of payment under a class price scheme is the same under each system. The farmer usually does not receive three or more different checks representing his payment for milk used in three or more different ways, but one check representing a "blended price."

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Take first the individual distributor who pools all the milk supplied him. Distributor Smith, let us say, agrees to pay dairy farmers three prices according to the uses he makes of their milk. For Class I milk, to be used for bottling, he will pay $2.50 per 100 pounds. For Class II, to be used for cream, he will pay, say, $1.85 per 100 pounds. For Class III, which is the milk he will manufacture into cheese, he will pay the lowest price of all, say, $1.50. All of the milk must contain 3.5 percent butterfat; if some of it is more or less rich than this, changes will be made in these prices. For the moment, however, we will assume that all the milk which neighboring farmers deliver measures up to this standard.

Theoretically the bottom underneath the three prices Smith pays his farmers is the price of butterfat in Chicago. This is the great wholesale center for butter, because it is close to the area where a great proportion of the butter, produced under the most favorable conditions, is made. The Class III price which Smith offers is some 3½ times the wholesale price of butter at Chicago plus 15 cents per 100 pounds, which represents the cost of transporting such butter from Chicago to his city. Class II price likewise is geared to the butter price in Chicago, but with a larger allowance made for transportation costs. Class I price is only indirectly geared to the Chicago butter price because conditions affecting the supply of milk for fluid uses are, as we have seen before, very different from those affecting the supply of milk for cream and manufacturing purposes. In the case of this type of milk Distributor Smith must rely on sources of supply—not in the lower cost dairy States—but in the area surrounding his city because of the sanitary conditions laid down by the local health board. And he must be sure of a steady supply which will meet his needs even in the period when cows in his neighborhood are producing least. So the price he offers for Class I milk is the price which he believes will most likely give him a supply that meets all these requirements.

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Now Distributor Smith obviously does not know at the moment when the farmers deliver their milk to him just how much of each farmer's supply is going to be used for the three purposes. The use depends on consumers' demand for fluid milk and cream. So instead of making immediate payment, Smith keeps a day-to-day record of the total amount of milk each farmer delivers and of his own sales of fluid milk and cream and manufacture of cheese. At the end of a month, let us suppose, this is the way the record looks:

Farmers have delivered to Distributor Smith 5,000 hundredweight of milk. Distributor Smith has used these 5,000 hundredweight in these ways and is obliged to pay these amounts, on the basis of the prices quoted above:

Class I...	2,500 cwt. @	$2.50=	$6,250
Class II..	1,500 cwt. @	1.85=	2,775
Class III.	1,000 cwt. @	1.50=	1,500
	5,000 cwt.		$10,525

For these 5,000 hundredweight, then, Distributor Smith must pay

Members of the Board of Directors of a large milk co-op are here threshing out involved problems of production, demand, and price, before presenting demands to the milk distributors.

Some producers' milk cooperatives take title to their members' milk and manufacture "surplus" supplies into dairy products. Truckloads of milk are arriving here at a plant owned by a cooperative.

$10,525. For one hundredweight he must pay $10,525 divided by 5,000, which is $2.10½. This is known as the "blended price." For every hundredweight of milk which each farmer delivered to him in the previous month Smith pays $2.10½. If Farmer Jones delivered 100 hundredweight in the month, he will get $210.50.

Suppose that the demand for *fluid* milk in that month had been greater than it was and Distributor Smith had disposed of the 5,000 hundredweight in this way and therefore had to pay these amounts to his farmers:

Class I...	4,000 cwt.	@	$2.50=	$10,000
Class II..	750 cwt.	@	1.85=	1,388
Class III.	250 cwt.	@	1.50=	375
	5,000 cwt.			$11,763

Had this been the way sales went, then each farmer would have received for each hundredweight of milk he delivered to Distributor Smith $2.35, instead of $2.10½ as above.

If demand for *fluid* milk had been much less than it was, such a ledger as this might have developed during the month:

Class I....	1,500 cwt.	@	$2.50=	$3,750
Class II...	1,000 cwt.	@	1.85=	1,850
Class III..	2,500 cwt.	@	1.50=	3,750
	5,000 cwt.			$9,350

Each farmer would have received as a result of such sales a blended price of $1.87, instead of the $2.10½ as above.

In actual practice this third situation in which sales of Class III milk are so much greater than sales of Class I seldom happens. As an ordinary thing most of the milk flowing into cities goes into bottles rather than into manufactured dairy products. But it can happen for a period.

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Obviously, under such a system of payment, even though Nation-wide competitive forces may prevent any increase in Class III prices, local dairy farmers' returns can be swelled in one or both of two ways: One, by increasing the price paid for Class I milk; two, by increasing the proportion of the milk sold as fluid. The strength of a producers' cooperative may be used in both directions, but cooperatives usually focus their efforts on building up the price of Class I milk. If the temptation to increase the spread between these two prices is indulged in too much, however, a new complicating factor appears to defeat such efforts.

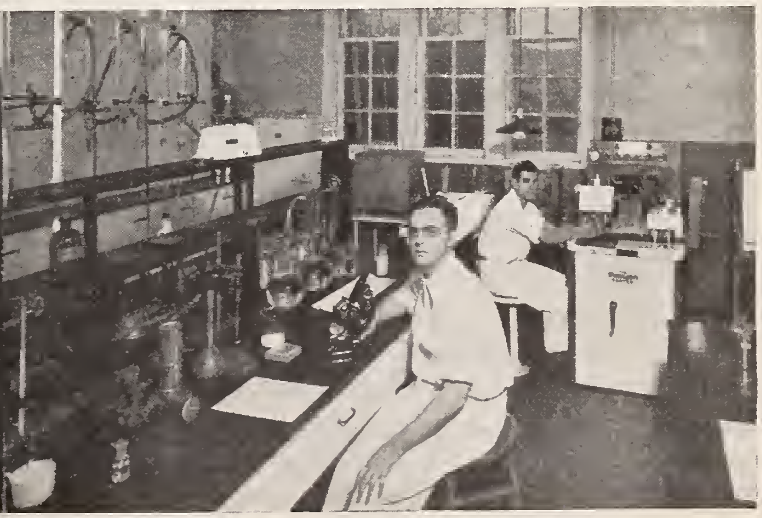
Distributor Brown steps into the picture. Brown goes calling on the farmers in the neighborhood and makes them what appears to be an attractive proposition. Suppose the price of Class I milk has been forced up to $2.70 per 100 pounds, while the price of Class III remains at $1.50. The "blended price" which Smith's suppliers get under this scale may run around $2.25 per hundred pounds. Brown proposes to farmers: "Sell me your milk, and I will pay you a flat price of $2.35 for it. That's 10 cents better than Smith's blended price to you."

Such a deal can last only so long as the Browns are unsuccessful in walking off with an important part of Smith's business. When they become too successful competitors, naturally Smith's $2.70 price for Class I milk comes tumbling down.

Uneven bargaining conditions among farmers or among distributors have led in some markets to the "cooperative pool" method of paying farmers. Under this method each distributor, instead of working out a "blended price" on the basis of his *own* use of milk, reports to a central agency the amount of milk he has received and the use he has made of it. This central agency, the "cooperative pool", collects such data from all member distributors and totals all receipts and all uses. Then

Keeping records of deliveries of individual members and payments to them is complicated business, requiring elaborate and well-maintained files. This office is maintained by a big producers' co-op.

Producers' milk cooperatives occasionally maintain fine laboratories, such as this one, where complete tests are made to determine the bacteria count of milk delivered by each member.



it finds out what percentage of *all* milk received was used as Class I, as Class II, or Class III, and so works out a blended pool price. Each farmer is then paid for his milk on the basis of this blended pool price.

Take, for example, this situation: The cooperative pool in X City finds at the end of the month that its member distributors have received from farmers, in all, 20,000 hundredweight of milk. It finds also, from reports by individual distributors, that these 20,000 hundredweight have been disposed of in this way: 75 percent as Class I, 15 percent as Class II, 10 percent as Class III. A single blended pool price is worked out on the basis of these uses.

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Cooperative pools balance accounts, as it were, this way: Suppose Distributor Brown had used 80 percent of the milk delivered by farmers to him as Class I milk. Had he been paying his farmers on the basis of his own use, his blended price would have been more than the blended pool price. Distributor Smith, on the other hand, may have used only 70 percent of the milk delivered to him as Class I. His farmers, therefore, get a higher price than they would have received had Smith been operating on the basis of his own pool system, as described before. By averaging uses, and using these averages as the basis for payment, the cooperative pool is intended to result in giving all farmers—regardless of the uses of milk by individual dealers—the same rate of return. Thus—theoretically at least—bargaining powers among the various farmers, on the one hand, and among the various member distributors, on the other, tend to be equalized.

A third variant of this payment plan is the "market-wide pool", which has come about since governments, Federal and State, have stepped into the picture to add a third-party control of milk prices. (As we pointed out in our last milk story, this third-party control is not necessarily representative of consumer interests but may simply attempt to adjudicate differences between producers and distributors.) Instead of reporting to the "cooperative pool", distributors under this system report to a milk market administrator. The milk market administrator gets out his adding machine at the end of the month and computes totals of milk received by all distributors from each farmer and of milk used in various ways by each distributor. A blended price is then computed on the basis of these uses, and the dealers pay each farmer for his milk at this price.

Theoretically, again, by making the whole market one unit and by making conditions of payment the same for all farmers supplying that market, fairer conditions for both sides result. In addition, by adding an independent milk market administrator who is hired not by distributors or producers but by the Government—and paid for independently—the opportunity for and the practice in manipulating accounts should be lessened.

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So far we have been describing class-price methods of payment to farmers as if these were the only methods used. There is one other general type of payment found in some markets—the markets where producers' cooperatives usually have not developed to a point where they are a force. This type of payment is called the "flat-price plan." Under this plan one price is paid for all milk with a specified butterfat content. Flat prices, however, do not mean that the use to which the milk is to be put is not considered at all. Uses are considered, and the final flat price is actually an approximation of the relative value of milk for all different purposes.

In general, farmers find that flat prices work out at a lower level than the "blended price" under a "classified price" system of payment. One reason for this is that the distributor who buys at a flat price assumes more risk in disposing of his milk profitably than does the distributor who pays for his milk according to the use he has made of that milk. Having a greater risk, he is therefore inclined to pay farmers less.

Other systems of payment are found here and there over the country. By and large, they are variations, however, of the two types now described: The "classified price" and "flat price" systems.

Milk production is seasonal. Not all milk producers are in the business full time. Some are what is known as "seasonal producers." Full-time producers produce milk the year round, in the winter when the feed costs are high as well as in the summer when pastures make feed costs low. Seasonal producers produce milk for the market only during the low-cost summer season or when the market is unusually attractive.

Result is that in early summer milk production overflows fluid milk needs, pushes the percentage of milk devoted to fluid-milk purposes down to the year-round low point. Average prices, or blended prices, go down as the percentage of milk used for fluid-milk purposes goes down.

Full-time milk producers are understandably annoyed when they receive lower prices for their milk; they are even more annoyed to see part-time dairy farmers horning into their markets. Dairies, too, faced with the problems arising out of wide seasonal variations in the production of milk, look for some method to give a special reward to regular producers.

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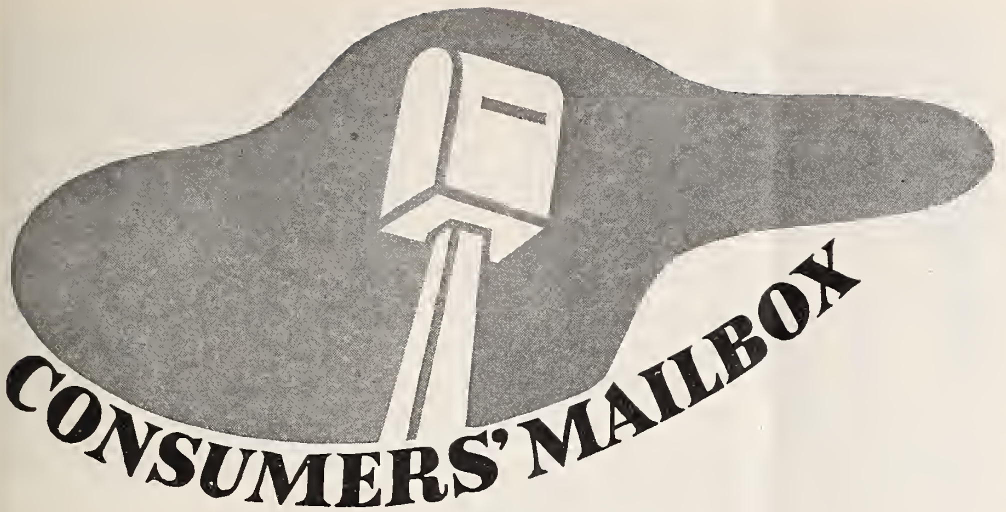
Technique devised to accomplish this is called the "base-surplus" plan. While an individual distributor may use such a plan, it is much more commonly used by a producers' co-

[Concluded on page 18]



CONSUMERS' MAILBOX

"In your publication 'Consumers Look at Eggs', you state that some distributors of Government-graded eggs mark the carton, 'Not to be sold after (date).' We admit ignorance of this practice and would appreciate information about the date limits set by these distributors and the length of time this type of egg dating has been employed."

Consumers' Guide is glad that its readers have found its bulletin on eggs so helpful. Copies may still be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C. The price is 10 cents.

Now to get down to the business of answering the double-headed question. Date limits marked on egg containers vary with different distributors. They range from 5 to 10 days—with 5 as the preferable deadline where possible. However, if eggs are properly handled, it is the opinion of Government experts that they will hold their original quality—as U. S. Extras, for example—longer than 5 days.

Sales of eggs under certificates of quality or seals have been under way for something like 7 or 8 years. The placing of a date on cartons by distributors, limiting the time beyond which the eggs should not be sold, is a more recent development. It does not, we believe, go back further than 3 or at most 4 years.

"What is the best way of storing potatoes? I have noticed that some of my stored potatoes acquire a disagreeable, sweetish taste."

Most of us apartment dwellers don't have to worry about this problem. We are lucky if we have a shelf or two in the kitchen on which to lay away a week's supply of foodstuffs. But for those fortunate housewives who have a home garden and a good old-fashioned cellar for storage, we have just the needed hints for keeping the potato crop for winter use. These hints are the outcome of a study recently completed by scientists of the United States Department of Agriculture and several agricultural experiment stations in the great potato-producing States. Request for this study came from manufacturers of the popular potato chip and from restaurant men who had long scratched their heads over the question why the flavor and texture of their cooked potatoes varied continually—often to the annoyance of customers. The experts who turned their attention to this matter found that the trouble lay with the storage temperatures. Their findings bear directly on the question that has been sent to the Consumers' Guide.

Here is what the scientists recommend: Store potatoes at an even temperature of 60° F., when they are to be eaten before New Year's Day—that is, before the end of their dormant season. Potatoes intended for use in late winter months or in the spring, must be handled differently to avoid sprouting. They should be held at about 40° F. Here is where the sweetish taste comes into the potato picture. It is the result of the sugar the spuds have developed in storage. So the potatoes must be reconditioned by storage at room temperature—that is, 65° to 70° F.—for about a week or two before consumption. The unpalatable taste will have entirely vanished at the end of this time.

Of course, these directions were framed particularly for commercial firms which could control storage conditions perfectly. But there is no reason why potatoes can't be put away in the home cellar if temperature and humidity can be maintained at the right level. Apparently a cellar with a dirt floor is more satisfactory for storage than one with a cement floor. It should have an insulated partition separating the furnace from the storage space. With frequent temperature readings being a necessity, a thermometer is standard equipment.

Darkness is required in the storage room since potatoes sprout if stored in a light place. There should be a window that can be opened on mild days or nights to allow for ventilation. In the North where winters are cold, potatoes can be piled high in a bin—preferably a slat bin on legs—but they should never rest against an outside wall. In warmer regions, potatoes do better if put in baskets or crates and placed on slat shelves. If they must be stored in bins, they should be piled only a foot or two deep to avoid overheating.

Now for one more tip. Apples or any other fruit should not be stored near potatoes. The fruit will take on the earthy flavor, so pleasant in the spud but so disagreeable in an apple.

"Is there any way of telling if the food inside an unopened can is bad? How does freezing affect canned food? I left some canned goods in my summer cottage a year ago. Undoubtedly these supplies froze during the winter months, since my camp is in a region of low winter temperature. I didn't try using these foodstuffs this year because I did not know whether they were safe."

There is one good check on the condition of food in unopened cans—the tell-tale bulge at the ends which indicates spoiled food. Spoiling food generates gases that exert pressure against the walls of the container, therefore curve the ends of the can outward. Ordinarily these end plates are flat across or slightly concave, as you may have observed.

There is no danger in eating canned foodstuff that has been frozen, unless the ends of the can from which it came bulge outward. That is the same rule that applies to unfrozen food too. Freezing may lower the grade of some canned products. That is, it may affect the taste and appearance unfavorably. But then there is this to remember: Even unfrozen, your canned goods might not have been in as good condition the second summer as the first. Time takes its toll in quality where canned goods are concerned.

"This year I expect to purchase a new winter cloth coat—a real event in my life. Can you give me advice that will help in making a good selection?"

Confronted with this large order we sent out an SOS call to the Bureau of Home Economics. The Bureau thinks shoppers are wise to ask for outside assistance, because the many new weaves and mixtures of fabrics on the market make it difficult to judge quality in coat fabrics. That is why so many people are agitating for labels on ready-made garments that tell all about the fabric. Tags provided by manufacturers can furnish the best way of finding out what you are getting, since the manufacturer is the only one who really knows what has gone into the making and finishing of the cloth. But such labels on coats are rare. So customers should take a long breath, summon their courage, and prepare to do a lot of asking. First ask the salesperson whether the coat you are considering is all wool or a mixture, and find out the quality of the wool. If she doesn't know, carry the matter a step further to the buyer. In case she fails you, get a written statement from the store that it will make a complete adjustment should the coat soon show defects with normal use.

Good quality wool gives a feeling of aliveness and springiness as you crumple it in your hand. Good coarse types of wool are best suited to coats from which you want hard wear. Soft fine wools are adapted to dress coats. Poor quality woolens are the ones to avoid at any price. They may be made of fibers that have been reworked until they are uneven, harsh, and stubby with most of the natural qualities of the wool destroyed. These fabrics feel heavy and boardy—to use the adjectives of the Bureau of Home Economics—and have no springiness. Coats made of such goods become baggy; the material looks matted and dull.

If the coat is a mixture, find out what the other fibers are and what is their quality. Wool is often blended with secondary fibers to reduce cost. The job may be so skillfully done as to avoid detection, but the other fibers may give the material undesirable characteristics. For instance, a large amount of cotton added to wool would make it less warm, less long-wearing, less wrinkle-resistant, and less likely to hold its color. To sum up these minus values a coat made from such material would be less likely to give satisfaction. When silks or synthetics are mixed with wool to give it a special fleck, you will want to know whether the second fiber is silk or a synthetic because silk is stronger and more elastic. Examine a coat fabric on both sides. For durability you will want a firm weave without loops on the surface to snag. Pull the fabric both ways to see if it stretches to excess. All materials should be thoroughly shrunk, and colors should be fast to sun, rain, cleaning, and perspiration.

Lining, interlining, style, workmanship—all these count toward a successful purchase. Consumers not familiar with tailoring are bound to run into trouble in judging workmanship in a garment that has so much of its detail hidden from view. However, they should remember to look for precise workmanship, short stitches in seams, and strong thread. Each part of the coat should have received a thorough pressing before the coat was put together.

We haven't the space to cover the whole list of points to check when buying a coat. Write to the Department of Agriculture, Washington, D. C., for Leaflet No. 117, "Quality Guides in Buying Women's Cloth Coats." It is yours for the asking as long as the supply lasts.

Washakie (Wyo.) County's clever 30-day food-buying experiment has captured the imagination of a prominent woman broadcaster in New York, who is going to tell her big eastern public all about it. She asks us for copies of questionnaires or other material used in this experiment. . . . We reported all available facts about the enterprise in our September 20, 1937, issue. To this correspondent, and any other readers who want to try the Washakie plan: Basic guide book is "Diets to Fit the Family Income", for sale by the Superintendent of Documents, Washington, D. C., for 5 cents.

Consumers' BOOKSHELF

Services of the National Bureau of Standards to the Consumer, compiled by Robert Martino. 1937, pp. 27, illus. Address: National Bureau of Standards, Washington, D. C. Free. Reviews the research work of the National Bureau of Standards in the field of consumer goods such as automotive equipment, electric lamps, garden hose, gas service and burner design, insulation and insulating materials, motor fuels, paint and varnish, shoes, cleaning materials, and textiles. References to the more detailed publications of the Bureau are included in the text. Information is given about the Bureau's work in establishing commercial standards, simplified practice recommendations, and the certification and labeling plans.

Facts, Fads, and Frauds in Nutrition, by Helen S. Mitchell and Gladys M. Cook. Bulletin No. 342. 1937, pp. 31. Address: Mailing Room, Massachusetts State College, Amherst, Mass. Free. This pamphlet is "a summarization of information, decisions, and criticisms by recognized authorities concerning nutritional and therapeutic claims in food advertising as well as faulty concepts and notions regarding foods and nutrition." Sections on vague health claims, weight reduction, laxative foods, aids to digestion and predigested foods, mineral content claims for foods, vitamin claims, disease cures, and therapeutic claims for foods, therapeutic claims for mineral and spring waters, quacks and how they operate, food legends, and bibliographic materials are included.

Conservation in the Education Program, by William H. Bristow and Katherine M. Cook, United States Office of Education, 1937, pp. 78, illus. Address: Superintendent of Documents, Washington, D. C. 10 cents. Purpose of this bulletin is "to provide school officials and others interested with information concerning progress so far made in introducing conservation into the school program, and to stimulate further progress through a description of instructional practices which have been successfully followed in a number of school systems." Lists of governmental and nongovernmental organizations engaging in conservation education activities and a bibliography are given.

Cooperative Bookshelf, by the Consumers' Counsel Division of the Agricultural Adjustment Administration and the Consumers' Project of the Department of Labor. Consumers' Counsel Series, Publication No. 3. 1937, pp. 13. Address: Superintendent of Documents, Washington, D. C. 5 cents. A bibliography of Government publications on consumers' cooperation, organized under the following headings: General materials, organization and management, statistics of operation, credit, rural electrification, farm purchasing, self-help organizations, periodicals, bibliographies, directories, study courses, and statutes. Summaries of important Federal court cases involving cooperatives are included. This bulletin brings together publications in this field which are of current use or interest and have been issued by the various Federal agencies whose work touches on consumers' cooperation.

Final Report of the League of Nations Mixed Committee on the Relation of Nutrition to Health, Agriculture, and Economic Policy. 1937, pp. 327. Address: Columbia University Press, International Documents Service, 2960 Broadway, New York, N. Y. $2. This report is the result of 2 years' work by an international committee of agricultural, economic, and health experts under the auspices of the League. The first section gives a general survey of the problem and the work of the committee. The second section summarizes "the new knowledge of nutrition." The third section contains a detailed examination of the economic and agricultural considerations connected with nutritional policy. The report concludes with a collection of evidence relating to the present state of nutrition in various parts of the world, demonstrating that in spite of considerable progress that has taken place in recent decades, the problem is still an urgent one.

MATHEMATICS AND MILK

[Concluded from page 14]

operative in determining payments to its producer members. In such a situation, dealers figure farmers' returns on a "use" basis and report to the co-op the *total* amount they owe their farmers. The co-op then calculates individual farmer returns on a "base-surplus" plan.

Under such a plan, "base" means the amount of *fluid milk and cream* sales (plus a margin of safety to meet possible extra demands from consumers). "Surplus" means all other milk. First there must be worked out a "base" for each individual producer. Each producer's "base" is the same proportion of *his* total deliveries as sales of fluid milk and cream (plus the extra amount) are of total deliveries of *all* farmers supplying the pool. (Some plans provide that such "bases" be adjusted quarterly, some monthly, to keep them in line with actual sales.)

To illustrate: Suppose that cooperative X employs the base-surplus plan in distributing payments among its farmers. During November these farmers deliver 5,000 hundredweight of milk every day through the cooperative. Sales of Class I and Class II milk total 4,000 hundredweight each day. That is, total fluid milk and cream sales represent four-fifths of the total milk supplied. This is the "base" for the whole market.

Now Farmer Jones, one of the co-op members, supplies 5 of the total 5,000 hundredweight of milk delivered. His "base" is four-fifths of his total deliveries, or 4 hundredweight. Farmer Jensen, another member, supplies only 1 hundredweight. His "base" is also four-fifths of his total deliveries, or 80 pounds. All these figures represent conditions in November, the slack production period.

Months roll by. Summer comes. In June, production of milk is heavier. Farmers are now delivering each day through the cooperative 6,000 hundredweight. Let us see now how payment is distributed to Farmers Jones and Jensen.

Dealers, as we said, pay for milk to the cooperative under a "classified" or "use" price plan. Suppose the rates are these: $2.50 for Class I milk; $1.85 for Class II; and $1.50 for Class III. Payments at these rates stack up as follows:

Class I...	3,000 cwt. @	$2.50=	$7,500
Class II..	1,500 cwt. @	1.85=	2,775
Class III.	1,500 cwt. @	1.50=	2,250
-	6,000 cwt.		$12,525

This sum, $12,525, represents all the money to be paid to the farmers supplying the 6,000 hundredweight of milk. If a base-surplus plan were not in operation and if every farmer were paid at the same rate, each of them would get a blended price of $2.09 per hundredweight, or $12,525 divided by 6,000. But under the base-surplus arrangement Farmer Jones is to be rewarded with a higher rate of pay than Farmer Jensen, because Jones is a better source of supply in slack winter months.

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So the dealers turn over to the cooperative the $12,525, and the cooperative sets to work to figure out the relative shares of Jones and Jensen in this pile. First the co-op determines the value of the excess or "surplus" milk. Back in November it was agreed between dealers and the co-op that the total base was 4,000 hundredweight. That is still the base in June. Deducting 4,000 from total deliveries in June, the co-op finds that in this month the "surplus" comes to 2,000 hundredweight. "Surplus" milk is paid for at the Class III price, $1.50. The value of the "surplus" is then $1.50 times 2,000 hundredweight, or $3,000. This value is then subtracted from $12,525 to get the total value of the "base" milk. The balance, or $9,525, represents "base" milk value. To obtain the price to be paid for each hundredweight of "base" milk, the co-op then divides 4,000 into $9,525 and gets approximately $2.38 per hundredweight.

Next job is to compute the sums of money to be paid to Farmers Jones and Jensen. Each of them, it will be recalled, has an individual "base." For this "base" milk each will be paid at the rate of $2.38. For all milk delivered above this "base", they will be paid at the rate of $1.50.

If Farmer Jones has delivered 5 hundredweight, he gets $2.38 for each of 4 hundredweight (his "base"), and $1.50 for the extra milk delivered. His average returns for the 5 work out at $2.20 a hundredweight. Now look at Jensen's returns. He, too, has delivered 5 hundredweight in June. But his base was four-fifths of 1 hundredweight, or 80 pounds. For this he receives $1.90, which is four-fifths of the $2.38 rate for "base" milk. In addition, Jensen has delivered 4⅕ hundredweight above his "base" amount, and for these he is paid at the rate of $1.50. His average returns for the total 5 hundredweight come to $1.64 per 100 pounds.

New dairy farmers, not yet participants in a base-surplus plan, sometimes find it difficult to get a "base" assigned to them. If a market is already sufficiently supplied with fluid milk and cream, to give a new farmer a "base" means reducing the "bases" of other farmers. Naturally those first in the market like to hold on to their prerogatives.

Variations in this attempt to reward steady producers with a higher return are frequently found. All of them present problems and sometimes these problems lead to serious friction. Charges of favoritism have been made against some cooperatives in their administration of such schemes. Certainly the base-surplus plan is a complicated method of payment and unless it is well understood by farmer members there is a strong argument against it.

MEAT GRADES AT YOUR SERVICE

[Concluded from page 6]

"It is peculiar that I never heard about this Government meat grading before. How long has it been going on?"

"Oh, a matter of 10 years. It's entirely a voluntary thing with the meat trade. Dealers who want their meat graded by the Government can get it done, and they pay for having it done. The service is maintained in most of the large cities. I understand that the Government men grade hundreds of millions of pounds of beef alone every year now. And I hear that a great many of the better hotels in the big cities now will buy only Government-graded meats."

"But a good many stores and meat markets still don't have this graded meat, do they?"

"No."

"Why not?"

"Well, I expect the final reason, when you get right down to it, is that the public demands these things very slowly. It will come in time. It will be a universal system. That is because it's in line with progress in all lines of marketing of food products. It makes it possible for the producer to get paid for the quality he produces. For the consumer it cuts the risk of paying for quality but not getting it, and helps her to select the quality that she can best afford.

"You are the consumer and in the end the meat trade will have to give you what you want. If you ask for Government-graded meat every time you go to market, sooner or later you will get it."

> "Only through a clear understanding by every citizen of the objectives, organization, and availability of the Government agencies can they render truly effective service and assure progress toward economic security."
>
> —FRANKLIN D. ROOSEVELT.

WHEN YOU BUY MEAT

Inquire as to which kinds of meat are selling at the lowest price at the time of purchase; price the different cuts of meat; and note the proportion of waste to meat per pound.

Ask for meat grade-marked with the Government grading stamp which runs like a ribbon from shoulders to legs of the animal so that each cut is marked. The grade names are:

Grade	Beef, veal, lamb, mutton	Pork	Sausage
1st	Prime	No. 1	U. S. No. 1
2d	Choice	No. 2	
3d	Good	No. 3	
4th	Medium	No. 4	
5th	Plain or common	No. 5	

If there are no grade marks, look for these indications of high quality:

BEEF.—*Flesh:* Light cherry red in color, velvety in appearance, firm, fine-grained, minimum of connective tissue. *Bones:* Porous, pinkish white in color. *Fat:* Brittle, flaky, creamy white, marbled as a network through the meat.

VEAL.—*Flesh:* Fine grained, firm, somewhat moist, light pink; the lighter the flesh, the more evidence of tenderness. *Bones:* Soft, red, small. *Fat:* White in thin layer over the exterior; pinkish on the interior of the carcass.

CALF.—*Flesh:* Firm, fine grained, velvety, light tan to reddish brown in color. *Bones:* Soft, small, very red. *Fat:* Generous quantity, creamy white.

LAMB AND MUTTON.—*Flesh:* Firm and fine grained; color varies from pink in lamb to dull red in mutton. *Bones:* Most important indication of age is the break joint just above the ankle, which breaks in four well defined, smooth, moist ridges in lamb; less well defined, more porous, dry ridges in yearling lamb; cut as a smooth joint in mutton. *Fat:* Creamy or slightly pinkish in young lambs, becoming white in older animals.

PORK.—*Flesh:* Light, grayish pink in color, firm, fine textured. *Fat:* Firm, white, marbled through meat.

OUR POINT OF VIEW

The CONSUMERS' GUIDE believes that consumption is the end and purpose of production

To that end the CONSUMERS' GUIDE emphasizes the consumer's right to full and correct information on prices, quality of commodities, and on costs and efficiency of distribution. It aims to aid consumers in making wise and economical purchases by reporting changes in prices and costs of food and farm commodities. It relates these changes to developments in the agricultural and general programs of national recovery. It reports on cooperative efforts which are being made by individuals and groups of consumers to obtain the greatest possible value for their expenditures.

The producer of raw materials—the farmer—is dependent upon the consuming power of the people. Likewise, the consumer depends upon the sustained producing power of agriculture. The common interests of consumers and of agriculture far outweigh diversity of interests.

While the CONSUMERS' GUIDE makes public official data of the Departments of Agriculture, Labor, and Commerce, the point of view expressed in its pages does not necessarily reflect official policy but is a presentation of governmental and nongovernmental measures looking toward the advancement of consumers' interests.

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Mrs. Blank's butcher gives her some pointers on how to reduce the guessing on quality in the meats she buys.

A LUXURY FRUIT TURNS PLEBEIAN . 7

Once a decorative note in the fancy fruiterer's, avocados now find their way to chain-store counters and make their claim on planners of more moderate priced menus.

MATHEMATICS AND MILK 10

Toughest of milk problems—for many farmers and most consumers—are current devices for paying farmers for this basic food. In this fourth of our series on "Milk for Millions" we dissect typical payment plans.

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FACTS FOR BLANKET BUYERS

CONSUMERS' Guide

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D. E. MONTGOMERY, *Director*
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Washington, D. C.

VOL. IV, No. 16 Nov. 1, 1937

WHAT is your community doing to get food for its future citizens? Providing school lunches is one of the easiest ways a community can earn a dividend immediately in healthier youngsters, later in sturdier grown-ups. The Government's Works Progress Administration gave this community service a big boost when it inaugurated its school lunch program in many cities throughout the country. In the past year and a half it fed over 1,000,000 undernourished children. As relief funds contract, the job falls back more and more on the communities themselves. Do you know how many children in your schools are undernourished? Do you know what kind of lunches they are getting? Are your consumer organizations taking a hand in getting a school lunch program started?

Headliners in such a program in many communities are the cooperative extension workers. Last year they organized lunches for nearly 600,000 school children. The success of these and other lunchrooms, organized under the drive of civic organizations, 4-H Club girls, and others, are proving that no school is too small nor too poor to have some sort of hot lunch for its boys and girls. It is also proving that the extra effort expended to establish these lunches definitely pays in the better health of the children.

In some cases, communities are providing their children only one hot dish, and the children bring the rest of their meal with them. Sometimes the community sets up a central kitchen, where the complete lunch is prepared and then rushed out to the school buildings. Some schools are lucky enough to be located near a church with a kitchen, where food is prepared. There are scores of ways of doing this job. It just takes some imagination—and drive—to find the best way in each community.

A good lunch for school means a nourishing, well-balanced meal, not a fancy repast. Hot food isn't absolutely necessary. Cold food is better than nothing. Whichever it is, the Bureau of Home Economics gives tips on what should be in a week's school lunch menu: Besides the main dish, each child should have at least one full glass of milk each day; some fresh fruit each day; tomatoes twice a week. As long as the supply lasts, this Bureau will send free of charge to planners of community programs its bulletin "Menus and Recipes for Lunches at School." Address your request to that Bureau, in care of the Department of Agriculture, Washington, D. C.

CONSUMERS in Cincinnati are trying out a new wrinkle in education. Organized in the Consumer Conference of Greater Cincinnati, formed 4 years ago as the result of a class in consumer problems given at the University of Cincinnati School of Household Administration, their program this year calls for rotating meetings, one at the headquarters of each of the various women's clubs throughout the city. At one meeting a federation of women's clubs will be hostess for the conference. At others the hostesses will be the Business Women's Club, the Catholic Women's Association, the Woman's City Club, the local branch of the American Association of University Women, the Council of Parent-Teacher Associations, and the Council of Jewish Women. Experts on leather, dry goods, linens, cotton, and furniture will give buying tips to consumers at these meetings, and consumers will have a chance to cross-examine industry representatives on the aids in wise buying which consumers want from the producers and merchandisers of such products.

WHEN is a gauze bandage a drug and when isn't it? It all depends upon who gives the answer.

The Federal Food and Drug Administration says that gauze bandages are drugs insofar as the Food and Drugs Act is concerned. In the act Congress defined a drug as "any substance or mixture of substances intended to be used for the cure, mitigation, or prevention of disease." Relying on this definition, the Food and Drug Administration claims the power to deal with gauze bandages, and the Federal court in New York City has upheld this view. The case has been appealed.

The administration prosecuted this case on the grounds that a shipment of bandages was labeled as "sterile" when they were not, in fact, free from germs. The Government charged that these bandages were both adulterated (with germs) and were misbranded, since they were labeled as "sterile" when not actually sterile. The Food and Drugs Act prohibits adulteration, and it also prohibits untruthful labeling of "drugs."

When a doctor or a homemaker buys and pays for a "sterile" or "sterilized" bandage instead of tearing a strip out of a worn-out but freshly laundered sheet, the Food and Drug Administration holds that he or she is paying for a "substance" that is "intended to be used for the cure, mitigation, or prevention of disease" and that the buyer is entitled to get a product that is safe to use and therefore of necessity surgically sterile.

Blanket labels should state percentage of wool and cotton, tensile strength of warp and filling, weight in pounds, and size in inches.

FACTS FOR BLANKET BUYERS

to make money count most in warmth and wear

Some like them blue, some like them green, others prefer to sleep under billows of pink or plaid. Individual tastes pilot our choice when deciding what color blankets to buy, but when it comes to judging the practical values of "spanking" new blankets on a store counter, the most experienced shopper needs some assistance. Sight and touch are not reliable guides for gaging their warmth, durability, or launderability.

The American Home Economics Association, realizing that consumers need facts in order to know values in blankets, recently recommended that labels carry the following information:

(*a*) Percentage of wool and cotton;
(*b*) Tensile strength;
(*c*) Weight in pounds;
(*d*) Size in inches.

Some blanket labels carry one or two of these facts. Few carry all of them. Perhaps the most usual information which manufacturer and retailer pass on to the consumer is the size and weight of the blanket, and the percentage of wool and cotton it contains. The latter, from the point of view of warmth, is most important.

When we say, "This is a warm blanket", we mean that it is a good heat insulator. It has the ability to enmesh a certain amount of air and to retain it so that zero winds can't whistle through the fabric, and the heat generated by our body will not escape through it too quickly.

Cotton and wool are the two types of fibers generally used in blankets. Either they are made wholly of wool or of cotton or a combination of both. Wool, because its innumerable interlacing fibers make myriads of air pockets for retaining air, is considered the best insulator.

It is also the more expensive of the two fibers. The difference in price between two blankets of the same size, made of the same quality fiber, should be largely dependent on the amount of wool used in each one. A cotton blanket, to have as much warmth value as an all-wool blanket, must be heavier in weight. A part-wool blanket, if it is to be appreciably warmer than an all-cotton cover, should be at least 25 percent wool.

On many blanket labels one will find the percent of wool given. In 1933, after a group of blanket manufacturers agreed to certain uniform regulations for labeling for all-wool and part-wool blankets, the National Bureau of Standards issued the following commercial standards:

"No finished blanket containing less than 5 percent wool shall carry the word 'wool' in any form. Blankets labeled with the word 'wool' in any form and containing—

"(*a*) Between 5 and 25 percent wool, shall be labeled 'part wool, not less than 5 percent wool.'

"(*b*) More than 25 percent wool, shall be labeled with the guaranteed (minimum) wool content in percentage.

"(*c*) Above 98 percent wool shall be labeled 'all wool.'

"The wool percentage above refers to the fibers employed and means the percentage of wool in the entire blanket and not in the filling alone."

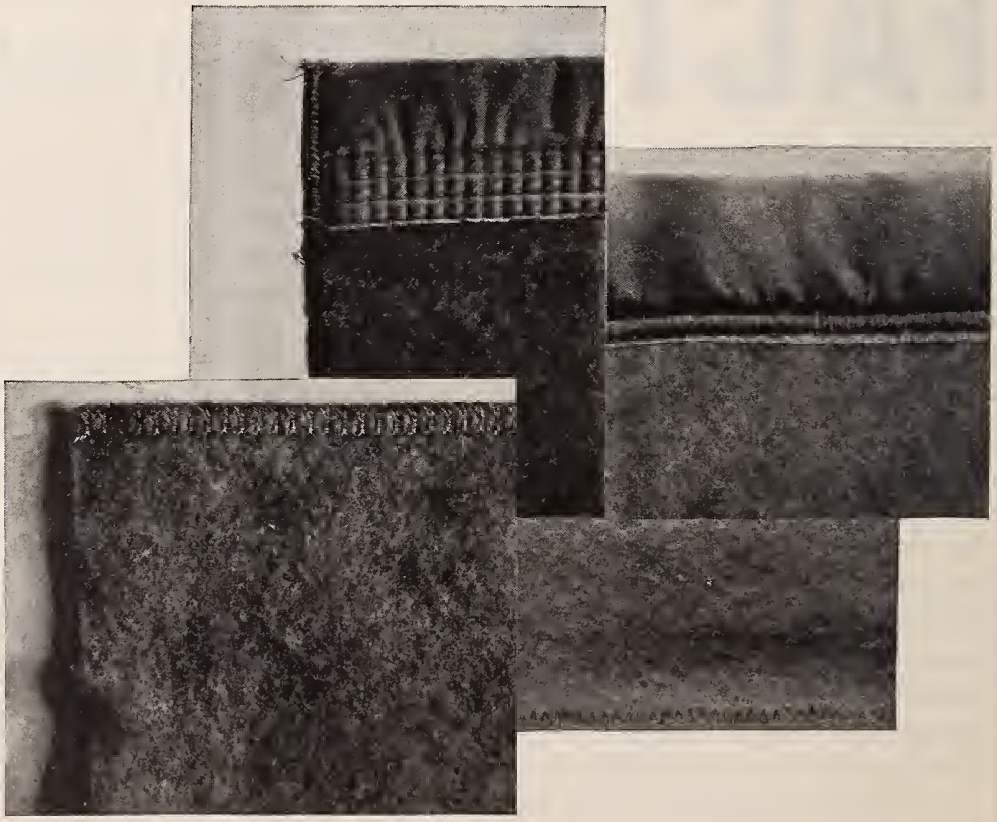
The adoption of these standards is voluntary with the manufacturer. He may designate the wool content of his blankets or not, as he wishes, but if he states the amount of wool used, he does it in accordance with the above regulations.

In comparing two blankets, the fact that they are both all wool or have the same percentage of wool does not necessarily mean that they will have the same insulating value. The quality of the fiber used, the firmness of the weave, and the amount of nap raised on the fabric all affect its potentialities as a first-rate protector against wintry blasts. An all-wool, loosely woven, overlapped blanket, for instance, will be far less satisfactory than one of cotton and wool which has been firmly woven and well napped.

Best amateur way to judge the weave of a blanket is to hold it against a strong light. If the weave is uniform and there are no thin spots, the weaving has been well done and the yarns not impaired by napping. If you are considering a blanket with contrasting borders, stripes, or plaids, be sure that they are woven in the same way as the rest of the blanket. If they seem more taut or full than the rest of the blanket, unsightly puckers and ripples may be the result of the first laundering. When you hold the blanket against the light, notice if it has been cut straight. A stripe or border is a good ruler. If the blanket is a plain color, its ends should run parallel to the filling threads. Badly cut blankets may appear straight when new, but they take on their true shape when washed.

The weave of a heavily napped blanket is often blurred when held against the light, but thin places in the body of fabric, due to overnapping, will usually show up. Blankets are napped to create more airpockets in the fabric and thus make better insulators. The trick is a good one if it is not overworked. In the napping process one end of the fibers from the filling yarns are lifted from the foundation cloth. If the ends of too many fibers are pulled free to make fluff, the foundation cloth is weakened. To judge whether a blanket has been well napped, examine it to see that the nap is uniformly distributed and that the foundation fabric shows no thin spots. Also if the fuzz pulls off easily, you may take it for granted that either the fibers used in making the yarn were

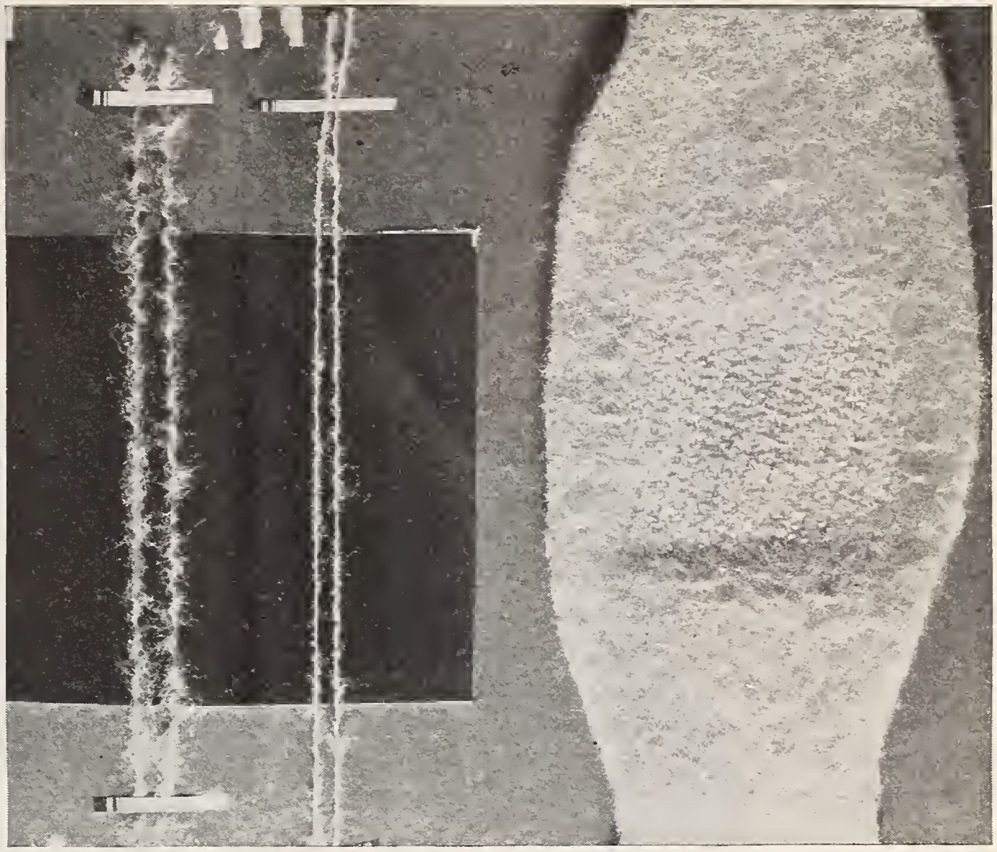
Bindings should be of materials that will not shrink more than the blanket when laundered. The ends should be neatly finished and the threads well fastened. The blanket stitch on light-weight blankets wears well if the threads are secure.



short ones or were broken during the napping process. Underneath the attractive fluff there may be many openings for cold drafts.

For long service one wants strength as well as warmth in blankets. Unfortunately, there is no accurate way for a consumer to gage the endurance qualities of a blanket. A label giving the tensile strength of both the warp and the filling is the best guide. According to standards set by one commercial testing laboratory, the tensile strength, or pull which a blanket should be able to stand before tearing, should be at least 15 pounds per inch in the filling direction and 25 pounds per inch in the direction of the warp. Unwelcome thin spots which appear in a blanket after it has been used for a short time are often due to the poor tensile strength of the filling. Yarns used in filling are usually weaker than those used in the warp, and they are weakened some by napping. Unless they are reasonably sturdy in the first place, they are likely to give way with wear.

Before launching forth on a blanket-buying expedition, know the width, depth, and length of your bed. Blankets range from 54 to 80 inches wide and from 76 to 90 inches long. Sometimes width and length are stated on the label, but it is wise to check these measurements. In a blanket study carried on by the Bureau of Home Economics, the measurements of only 3 of the 22 blankets examined tallied with the claims made on the labels. An ample blanket makes for comfort and longer wear. Pulling a blanket taut to cover exposed toes or shoulders strains the fabric. To have room to twist and turn, the cover should be long enough to spread over the entire bed with about 6 extra inches for tuck-in at the foot and with a few inches to spare on the sides to allow for the depth of the mattress and for the take-up by the body. It is best to throw in a few extra inches to allow for shrinkage. All blankets will contract a little in the first laundering. Shrinkage of wool blankets should not be more than 5 percent.



Underneath the fuzzy nap should be a firmly woven fabric. Warp yarns are more tightly twisted than filling yarns. In napping, the loose ends of fibers in the filling yarns are pulled to the surface.

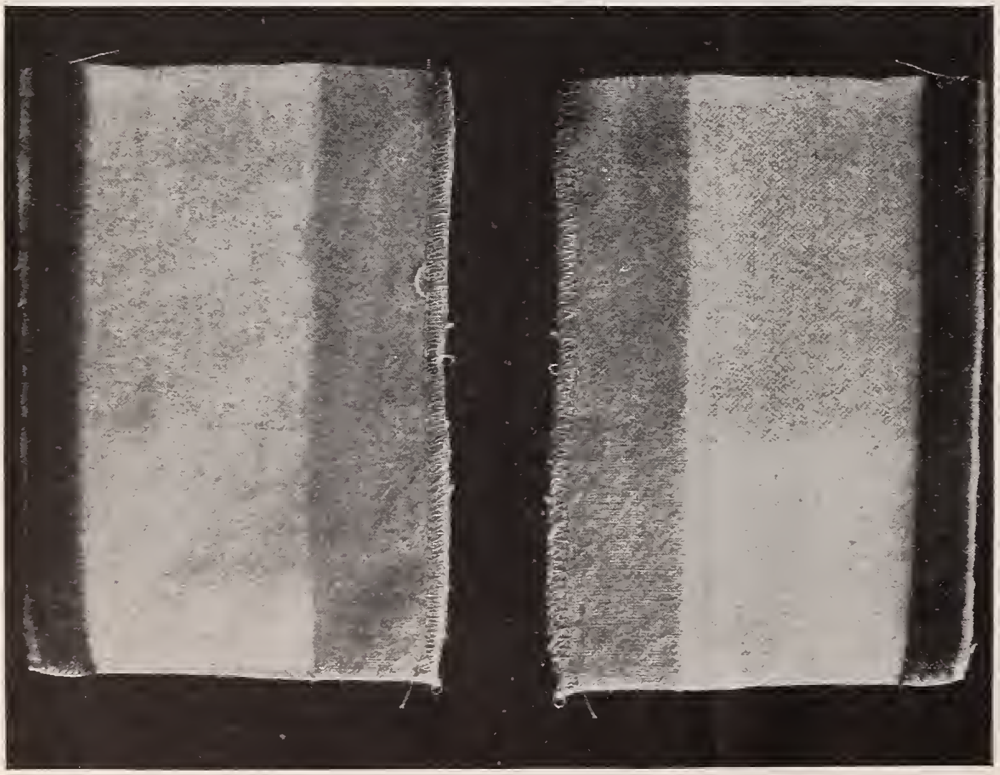
Nap of blanket should be firmly embedded in the fabric.

Information on the label about the weight of a blanket is helpful in comparing two blankets of the same size and fiber content. If two blankets are identical in this respect and are also the same price, the heavier one will be warmer and more durable, as its fiber content will be greater. Comparison of weight of blankets is no indication of value, however, if they are not comparable both in size and kind of fiber used. Blankets of different sizes can be compared for weight only when the number of ounces per square yard of blanket is stated on the labels.

Consider the binding on a blanket. Unless it is made of good quality material it will go ragged long before the blanket wears out. Usually silk, cotton sateen, or rayon is used for finishing. For long service, sateen is probably the first choice. Advantage of silk and rayon is that they soil less easily and are apt to hold their color better than sateen. Bindings should be neatly finished at the ends. If the material is cut off flush with the side of the blanket and finished with a lockstitch, be sure that the threads are securely fastened. In better-quality blankets the boxed corner is used.

For comfort and durability, blankets should be long enough to allow for at least 6 inches of tuck-in at the foot of the bed.

Be sure that contrasting plaids of a blanket are woven at the same tension. A difference in weave may cause ripples after the first laundering which you cannot smooth out. This blanket has been evenly woven but has been carelessly finished. Result: Loose threads ready to ravel.



If your blankets come from the wash "stiff as a board" or stretched out of shape, chances are that your washing technique is wrong. Wool, due to the water it absorbs, is much weaker when wet and must be handled with care. Rubbing and twisting strains the fibers, and also gives them a chance to interlock or felt. Original fluffiness is destroyed, and the blanket will no longer be as soft and warm as when it was new. Only soft warm water and neutral soaps should be used. Water and soap should be pressed rather than wrung from the blanket. In drying a blanket be sure that its weight is evenly distributed on each side of the line so there is less strain on the fabric. While drying, it's a good idea to give the blanket an occasional shaking. It helps to restore the fluffiness of the nap.

For more tips about blankets, write to the Superintendent of Documents, Washington, D. C., for the Bureau of Home Economics excellent pamphlet, "Guides for Buying Sheets, Blankets, and Bath Towels." 1765–F. Price 5 cents.

CHECK YOUR VITAMIN C

Richest source is citrus fruit, and oranges are tops among citrus fruits for this valuable nutrient that helps bodies to resist fatigue, loss of weight and appetite. Market forecasters predict a banner winter for oranges, with millions of boxes more than average coming to market. Here are some facts about "kid-glove" oranges—tangerines to you—on markets from November to January*

NOT so many years ago, if you were living deep in the woods of Maine, orange juice for breakfast was something to write home about. Today, wherever you happen to be in the United States—north, south, east, or west—and whatever the season, citrus fruit, both fresh and canned, can usually be purchased at the store around the corner. Thanks to rapid transportation and efficient methods of distribution, fresh oranges are regarded as a staple food in Maine just as they are in the Southern States where they are grown.

Orchards in California, Florida, and the Gulf States supply the markets of the Nation with oranges the year around. California sends them east by the carload each month. Her heaviest shipments of dessert oranges come to market from November through May, and her juice oranges are shipped from May to November. Florida and the Gulf States send the bulk of their crop from October to June.

Two leading types of oranges packed in these millions of boxes are navel oranges, often called dessert oranges, and Valencias, famed for their juice. Both types belong to the sweet orange family. However, a small percentage of our orange crop belongs to the Mandarin group and is known by the trade as "the kid-glove varieties." Kid-glove oranges, or loose-skinned types, come to town for only a few months of the year. A few carloads appear in October, but they play their most important role in the citrus parade during the holiday season, from November to January. In February they make their exit and leave the stage for the great family of sweet oranges.

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*For tips on other types, see CONSUMERS' GUIDE, Jan. 28, 1935.

To most consumers an orange which sheds its skin with the greatest of ease means a tangerine. In reality the tangerine is only one group of the Mandarin type. The bright orange-yellow kid-glove oranges that reach the market in October and November from southern Alabama, southern Mississippi, and certain other sections of the Gulf Coast region belong to the Satsuma group of Mandarin orange. To devotees of dessert oranges, the early appearance of the Satsumas is always welcome. Navels from California are not at the peak of their season in the early fall, and the high-grade sweet oranges from Florida have not as yet appeared in quantities when the Satsumas are plentiful.

The leathery rind of the Satsuma is much lighter in color than that of the true tangerine, but as it peels as easily and divides as readily into sections, to the consumer it is just a lighter-colored tangerine.

True tangerines are shipped from the South in December and January. The rind of the tangerine is such a deep orange that it can almost be called a tomato red. The flesh is also a darker orange than that of the Satsuma, and it matches the Satsuma's 1 to 4 seeds per fruit with 7 to 20. Like the Satsuma, it has a sprightly flavor and pleasant aroma.

California leads in the production of navels and Valencias, but when it comes to cultivating the kid gloves, Florida and the Gulf States step into first place. Growers in Louisiana, southern Mississippi, and southern Alabama are inclined to favor the Satsuma above all other oranges, as it is the most frost-resistant of all the orange types. Both the soil and climatic conditions of the Gulf Coast region are well suited to the raising of the Satsuma orange. Attempts to date to raise loose-skinned oranges in California have resulted in a small-sized, somewhat acid-tasting fruit.

Tangy taste of the Satsuma and tangerine, their pleasant well-blended, acid-sweet flavor, make them a perennial favorite. Consumers' most frequent complaint against Satsumas and tangerines is that sometimes they are dry and the pulp is woody. Insipid flavor may be due to soil conditions or to freezing. Unfortunately, it is difficult to tell by the look of an orange whether it has been frozen or not. A good quality tangerine, like a good quality orange, should be juicy. If full of juice, it will feel heavy for its size when held in the hand. Like sweet oranges, the skin should be fine-textured and well-colored, either deep yellow or orange, depending on the variety. Fine appearing fruit does not always signify fine eating quality, but chances are that if an orange is well-formed and mature, and if its skin is fine-textured for its variety, it will be as good as it looks.

Government grades are established for Satsumas, tangerines, and other members of the Mandarin clan. Top grade is U. S. Fancy. Others are U. S. No. 1, U. S. No. 2, U. S. No. 3, and U. S. Combination. A box labeled with the latter grade may be a mixture of U. S. No. 1 and U. S. No. 2 fruit. These Government standards, in addition to factors affecting appearance, are based upon such factors as maturity and freedom from damage by dryness and defects which are a likely source of decay.

All orange orchards require careful cultivation if they are to bring results to the grower, but kid glove varieties in particular need exacting care. Even with attention, the yield per tree is usually not as much as that of the sweet orange. Since in China, the native home of the orange, loose-skinned varieties were costly fruits which only the well-to-do could afford, a western scientist, searching for a name for the loose-skinned varieties, classed them as the Mandarin group. Years later, a Florida grower jokingly called them the "kid-glove" varieties, and the name stuck.

In this country, the tony name does not mean high cost. During December, when the season for Mandarin oranges is at its height, and the navel season is not yet in full swing, fine-quality tangerines are often one-quarter lower in price than navel oranges. Like navels and Valencias, varieties of the self-peeling type are considered an excellent source of Vitamin C.

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"Perhaps we may solve the problem (of wise spending) by developing a professional class of doctors of domestic science who will be employed in organizing households, giving expert counsel to the newly-wed, holding free dispensaries of advice for the indigent, assisting in divers municipal ventures in welfare work, and the like. Then the training of the mass of women may be confined to such an exhibit of the complexities and responsibilities of their work as will induce them to employ these elect as freely as they now employ physicians."

—Dr. Wesley C. Mitchell, Economist.
A forecast made in 1912.

"What consumers want to know is this: Can a case be made for the higher retail price or for the failure of the price to drop?"

SHOULD CONSUMERS UNITE?

Consumers' Counsel D. E. Montgomery sums up the case for consumer organization*

THE experience of the past 5 years has brought no result more significant, historically, than the emphasis it has placed upon collective action. Every manner and kind of person today has either the opportunity or the hope of joining with others to do something about the position in which he finds himself. Public acceptance of the right of any and all citizens to bargain collectively in their own interest is probably the most important contribution of our time.

In early years collective bargaining was actually a crime, for some people. Then for many years we gave lip service to it as a right of all citizens. But now we know for sure that they have that right and may be expected to use it. Labor, farmers, all kinds of business, and even the professions are making use of collective action today and for many of them and for all of us it is a new experience in citizenship.

People of conservative temper fear this thing. Moderate conservatives shudder at collective power, fear it will be abused. Ultraconservatives fear, no doubt, that it threatens the rather exclusive use of collective power. In the past they had less rivalry to the collective power which they themselves enjoyed. It is easy for us to forget that as long as we have had corporations we have had a form of collective bargaining. And we only recently have come to appreciate that the devices whereby control of corporations becomes distinct from ownership are a source of enormous collective power.

We need courageous judgment of this rapid spread of collective power which results from the organized action of all different kinds of people. It is difficult to understand how we can expect to make democracy work without this grouping and organizing of our individual problems. It can bring us closer to an equality of opportunity, more nearly equal power for those who have heretofore been under the domination of others. It promises better organization of society, better citizenship, a more responsible mutuality between the individual and his government. Clearly the problem before us is not to suppress these new forces, but to learn how they shall be brought to serve a common end which we call the general welfare.

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*From a recent address before the Michigan State League of Women Voters.

"Public acceptance of
to bargain collectivel
ably the most import

This is the problem of balance. When organized action is actually available for every class of citizen, there will be a better balance between the relative well-being of different groups. There will be less abuse of power, because there will be more equality in the use of power. This is a very important part of the problem of balance, but it is not the whole of it. What we should be after, through group action, is not only a better balance between the well-being of different groups: we want to raise the level of existence of all individuals of all groups.

To understand the other part of this problem of balance we must recognize that most of the collective action which we are organizing today is all of one general economic type and that this general type does not extend to all of our economic purposes. Practically all of it is producer action.

These bargaining groups are made up of people who come together because they have the same thing to sell. They associate as producers. The basis of their association is the commodity or service they produce, and the purpose of their uniting is to sell it to better advantage. It may be a single farm product, or it may be all farm products, or the products of a region; it may be a particular labor skill, or it may be all labor in a particular industry; it may be a professional service; or it may be the products or services of a business undertaking. The commodity may vary a great deal; the essential purpose is the same throughout. Common to all such groups is their primary concern with income—how much money they get for what they produce or sell. This is the most usual purpose for which we organize.

It is hardly surprising that this is so. It seems quite natural to us. Yet as a matter of fact there is something unnatural about it. The individuals who comprise these producer groups are only in part producers. They are also in part consumers. The natural thing about them is that they have a dual personality, made up of a producer interest which wants to get as much as possible for what it sells, and a consumer interest which wants to get as much as possible for what it spends. Yet all these dual personalities of each of us are getting together all over the country in organizations which are concerned with only one-half of our double problem. In spite of the rapid spread of organization to more and more kinds of people it remains almost entirely upon a producer basis.

This fact brings up another aspect of the problem of balance.

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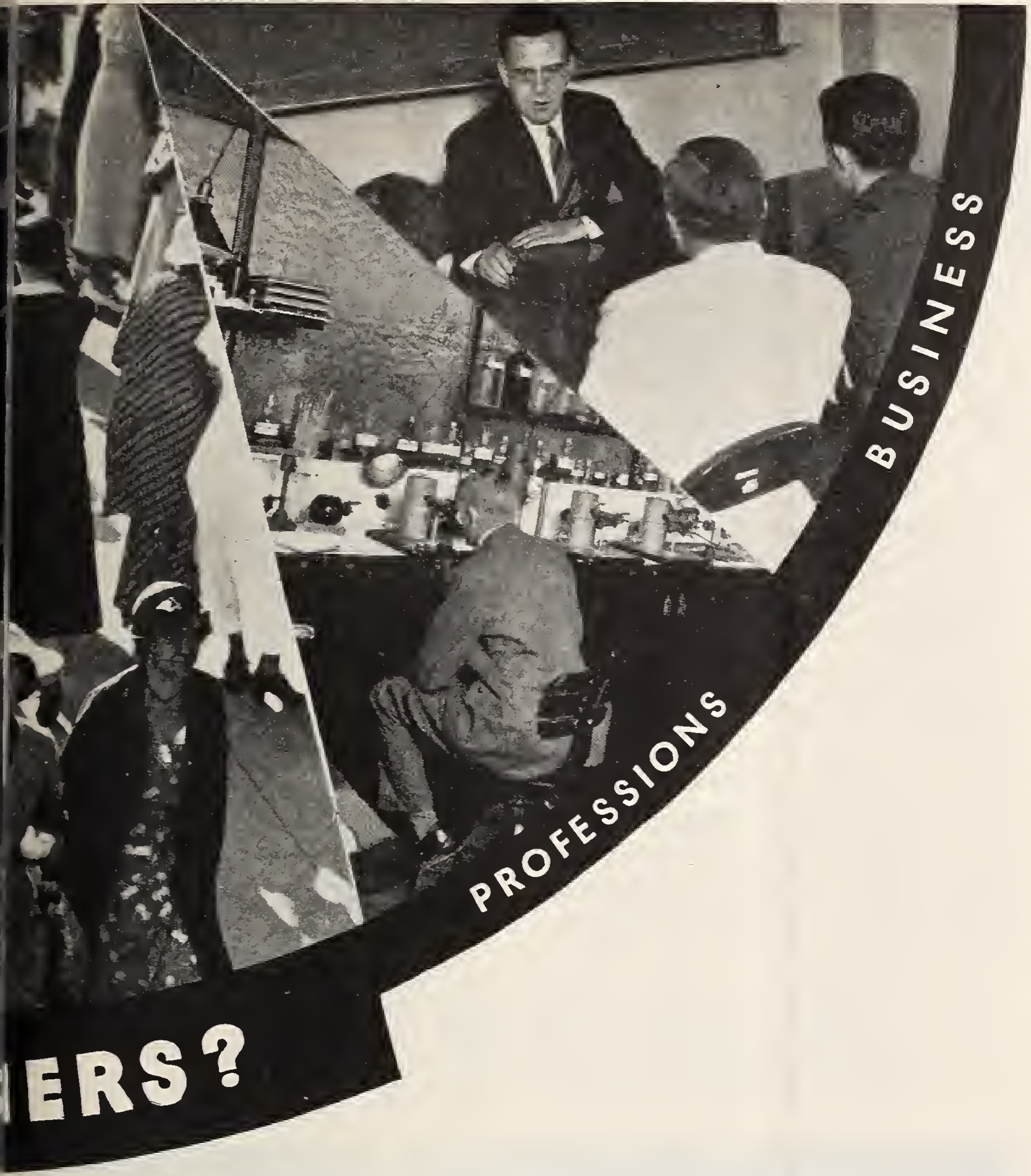

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skilled in collectively selling things to each other, shall we really be doing well by ourselves as consumers? In addition to achieving some working sort of balance between our various producer groups, do we not need to balance our producer purposes against our consumer needs?

Perhaps we shall not recognize this problem and face it squarely. It is possible that we shall concentrate all our collective efforts upon the number of dollars we get for what we produce. Yet it is certain that we can't eat dollars, we can't wear them nor live in them. We can only earn them and then spend them. It is possible also that we shall work out everything to the approximate satisfaction of all these producer groups. Yet we may do that and still fail to bring about that increase in the volume of goods and services which alone will provide larger *real* incomes and satisfy our needs as consumers.

As producers we may all some day get just that share of the national income to which we think we are entitled. Yet if the total income of which that share is a part remains too small, why we really haven't accomplished very much after all.

All down the line of production, goods move along through transactions between people who have a very real appreciation and a considerable knowledge of what they are about. They are producer folk, looking out for their incomes. They are organized. But at the end of the long process the goods pass over the retail counter to a person who is just a consumer.

That person knows very little about what went into the things he buys. Possibly he knows what it costs him. (Not even that is certain.) The chances are he doesn't know why it costs so much or so little, as the case may be. As long as he acts independently there is not much he can do about any of these things. The ignorance and comparative helplessness of consumers are a temptation to every organized producer whose goods or services go into the making of the things we buy.

Take for example the bottle of milk which arrives at consumer doorsteps every morning. Much collective bargaining has gone into the processes which got that milk to consumers and put its price upon it. Farmers who produced the milk, distributors who sell it, and the driver who carries it to the doorstep have had many points of difference to iron out between themselves, and they have been doing just that through collective action for many years. These groups are not natural born enemies of consumers or of the public interest, but the solution of many of their conflicts has been made easier because consumers have been absent from the conference table. If now and again they have to pay a higher price because that higher price was a way of settling differences between these other parties, consumers have only themselves to blame.

Often the failure of producer groups to take consumer interest into account leads them to patch things up among themselves in a manner which turns out to be merely a temporary expedient and in the long run injures themselves as well as consumers.

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This is the problem of balance. When organized action is actually available for every class of citizen, there will be a better balance between the relative well-being of different groups. There will be less abuse of power, because there will be more equality in the use of power. This is a very important part of the problem of balance, but it is not the whole of it. What we should be after, through group action, is not only a better balance between the well-being of different groups: we want to raise the level of existence of all individuals of all groups.

To understand the other part of this problem of balance we must recognize that most of the collective action which we are organizing today is all of one general economic type and that this general type does not extend to all of our economic purposes. Practically all of it is producer action.

These bargaining groups are made up of people who come together because they have the same thing to sell. They associate as producers. The basis of their association is the commodity or service they produce, and the purpose of their uniting is to sell it to better advantage. It may be a single farm product, or it may be all farm products, or the products of a region; it may be a particular labor skill, or it may be all labor in a particular industry; it may be a professional service; or it may be the products or services of a business undertaking. The commodity may vary a great deal; the essential purpose is the same throughout. Common to all such groups is their primary concern with income—how much money they get for what they produce or sell. This is the most usual purpose for which we organize.

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Often the failure of producer groups to take consumer interest into account leads them to patch things up among themselves in a manner which turns out to be merely a temporary expedient and in the long run injures themselves as well as consumers.

"All down the line of production, goods move along through transactions between people who have a very real appreciation and a considerable knowledge of what they are about. . . . But at the end of the long process the goods pass over the retail counter to a person who is just a consumer."

In a world which is driving ahead under the steam of so many organized producers, we need to be forced to check our immediate producer purposes against our immediate consumer desires in order that the things we actually do shall add up to a long-run result acceptable to us in both capacities.

Specifically, what might organized consumers aim to accomplish?

There are two broad fields of action: to get unbiased, useful facts on the kind or quality of things they buy; and to get the facts behind the prices they pay and to give them a responsible part in the pricing process.

In the first field consumers are already doing some things. Testing services which report to their consumer subscribers the facts and qualities of goods by name go most directly to the heart of this problem. They are a unique contribution made by America to our economic life. Consumers in Europe are far ahead of this country in cooperative undertakings, but the practice of pulling goods apart, submitting them to laboratory analysis, and reporting the results to consumers is original with the consumer movement here.

Consumer organization has already been the chief pressure behind the demand for more informative labeling of commodities which now is occupying the attention of leaders in the field of retail merchandising. Organized group effort directed to those who sell consumer goods and to the education of consumers who buy them is clearly the program for consumer action in this field.

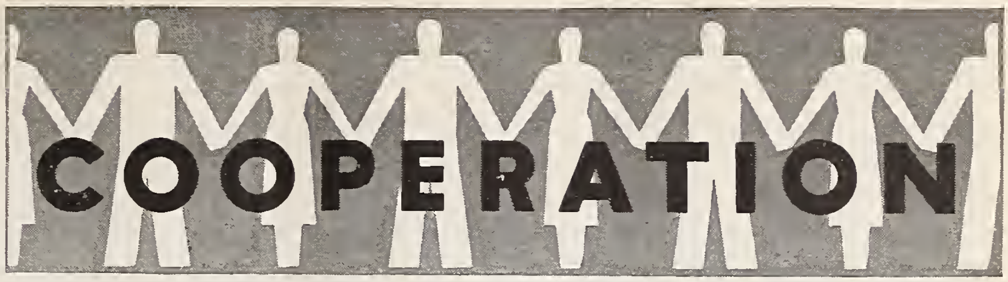
In the vast field of retail prices much less start has been made by consumers in an organized way. Here is the great problem of the High Cost of Living. Producer groups aim to meet it by getting larger and larger income for their members. To some extent they may succeed. Earnings and income are going up right now more rapidly than the cost of living. That is a good sign, but is it enough?

More income, we know, can buy us more goods at unchanged prices, or the same quantity of goods at higher prices. The fact that earnings are moving ahead of rising living costs is not the whole answer for consumers. Consumers want more goods for that greater income, not higher prices. They want to know why the cost of living goes up at all; what is the reason for price increases in each particular case; why prices cannot be reduced when the underlying facts seem to justify; who gets the larger income, if any, which results from the higher prices; how much of it is going to labor or to the farmers? In short, what consumers want to know is this: Can a case be made for the higher retail price or for the failure of the price to drop? These are the questions which representatives of organized consumers would ask, and which it should be their duty to answer to the consumers whom they represent.

To be sure, a balance must be maintained between our industries and between their relative output and their relative costs and prices.

[Concluded on page 19]

"What we should be after, through group action, is not only a better balance between the well-being of different groups. We want to raise the level of existence of all individuals of all groups."



COOPERATION

Consumer cooperatives and credit unions were strongly endorsed by the executive council of the American Federation of Labor in its report to the recent Federation convention. Attention was called to the success of European cooperatives in improving the standard of living of wage earners' families. "We heartily endorse Rochdale consumers' cooperation in principle", said the report. Certain safeguards were urged, including recognition of trade unions, and "studying the principles of sound business management."

"Cooperation brings together city consumers and farmers by removing all intervening toll bridges at which both are burdened with extra charges", says the Akron (Ohio) Consumers' Cooperative, which reports that it has already "joined hands with the farmers through the Ohio Farm Bureau", to give cooperative insurance protection. The Akron group, now in its second year of business, announces sales to members alone of $11,500 for the first 6 months of this year; net gains on these sales of almost $900; a patronage dividend of 6½ percent. Chief activity of the cooperative is a service station which, with sales to both members and nonmembers, did a business of almost $11,000 in the first half of 1937.

Missouri farmers operated 410 local marketing and purchasing co-ops in 1935, according to a survey by the State College of Agriculture. Sales for the year came to $31,000,000. These figures are exclusive of co-ops dealing only in gas and oil. . . . Fifteen percent of the eggs, nearly 20 percent of the poultry, 12 percent of the butterfat, and more than a fourth of the wheat from Missouri farms passed through a local cooperative exchange elevator or creamery on the way to consumer tables.

Rural electric co-ops have generally bought their energy wholesale from private sources, then distributed it to member-users. Ten Wisconsin cooperatives, however, joined in the Wisconsin Power Cooperative, have just let a contract for building their own Diesel generating plant, at a cost of $196,000, to serve 10,000 farmers in 11 northern and western counties of the State. This move, approved by the Rural Electrification Administration from whom the cooperatives are borrowing the initial funds, brings to an end 2 years of negotiations between the co-ops and a private utility company. "Wholesale rates should be based on costs, not on haggling", declares Rural Electrification Administrator John M. Carmody. "Attempts to get a low wholesale cost failed; the farmers themselves urged a generating plant. A careful engineering study made on the ground indicated such a plant will pay out if farmers use electricity effectively. . . . We believe they will support their own plant."

Wisconsin farmers, seeking cooperatively to bring electricity to the four out of every five farms in the State still without electricity, hope for help from the Wisconsin Development Authority. Recently created by the legislature, the Wisconsin Development Authority has just been sustained in its first court test. Actual operation of the WDA (called in Wisconsin a "little TVA"), however, is still tied up by an appeal to the highest State court. . . . The WDA is authorized to carry on educational and promotional work in behalf of rural electric cooperatives, municipal power districts, and municipal ownership of utilities; to furnish technical and supervisory services for such agencies and for private plants; to acquire and operate utility plants or facilities such as generating plants for rural electric co-ops. A first year's appropriation of $60,000 was given to the WDA for educational and promotional work.

The more the cooperatives grow up, the more cooperators go to school, it seems. On October 11, the Cooperative League Institute, "a college for prospective cooperative executives", opened in New York, with 20 students from 13 States and 1 foreign country enrolled. This is the first national training school for the American consumers' cooperative movement. The 4-month course combines 2 months of lectures, discussion, seminars, and cooperative observation, with a second 2 months of field work with co-ops in various parts of the country. Thirty-five educators and executives in the cooperative movement will talk to the students; and several cooperatives have arranged for students to do field work with their organizations.

A week earlier, the Central Cooperative Wholesale Society's resident training school opened its thirteenth session at Superior, Wis. Thirty men and five women were registered for courses that will equip them to carry on managerial and other work with retail cooperative societies connected with CCW.

Antioch College, Yellow Springs, Ohio, and the Ohio Farm Bureau are collaborating to give two courses in cooperation this year. An introductory course, dealing with the history, principles, and present-day growth of the co-op movement draws school teachers, county extension agents, co-op managers, and board members, as well as Antioch students. An advanced course in consumer economics, and problems of cooperative operation and expansion, is given for advanced students and people actually employed by cooperatives. Classes are held in the evenings, to accommodate nonresidents.

Meanwhile, Minnesota and North Dakota have joined Wisconsin in giving public school students a knowledge of consumers' cooperation and cooperative marketing. Minnesota's State legislature at its special session last summer appropriated $5,000 for the preparation of co-op study material for both elementary and secondary schools. North Dakota has cooperation down as one of the optional courses for high-school students.

THREE years ago Racine people started one of the first city gasoline cooperatives in the State of Wisconsin. Beginning with a paid-in capital of only $1,500 contributed by 300 members, the Racine Consumers' Cooperative has grown to include four automobile service stations, a repair garage, a grocery store, coal deliveries, and a home-appliance division. Savings returns on purchases have run between 6 and 9 percent, while the business has been expanding its services. The co-op now has 2,300 members. Sales in all departments were $112,000 in 1936. Gasoline has just begun flowing from the co-op's own bulk plant.

Business has grown on something more than sales figures. "Racine's experience", writes one of the co-op's leaders, "points to the conclusion that cooperative development in urban areas is stimulated when it is recognized that the movement is social as well as economic." Cooperators have come together in classes to discuss cooperation; they have put on movies of cooperatives in other countries; and short plays with a "co-op point." General meetings during the winter have alternated between recreation and education.

ENTERING one of the oldest and most successful forms of farmers' cooperative activity, the Midland Cooperative Wholesale of Minneapolis, noted for cooperative oil purchasing, is backing the new Midland Mutual Fire Insurance Association. The Association aims "to extend the service now rendered to farmers by township mutuals, to cooperatives, and town dwellers", and reports over $800,000 worth of fire insurance already applied for.

THE Nebraska Farmers' Union State Exchange reports that total patronage refunds on members' purchases for 1936, including oil association purchases, came to $40,846. Less than $4,000 of the refunds have been retained for working capital, and paid for in Exchange shares. Writes the Exchange manager, "I am hoping that the next annual meeting of Exchange shareholders will encourage the plowing back of a larger share of the patronage refunds each year. Grow we must if we are to meet the wants of our members. Expansion takes additional capital. The natural way to get additional working capital in a cooperative is to retain part of the patronage refunds."

OHIO'S Farm Bureau Cooperative Association continues to hang up records. During the first 6 months of this year Ohio farmers bought $4,417,000 worth of goods through 79 county-wide Farm Bureau cooperatives. This was almost a million and a half dollars more than the total for the same period last year—a record at that time.

MEETING in an interstate Farmers' Union cooperative conference at Sioux Falls, September 20 and 21, farm co-op leaders from Kansas, Nebraska, Iowa, Minnesota, South Dakota, North Dakota, and Montana, discussed cooperative marketing, cooperative purchasing, and cooperative banking and insurance.

Grain marketing discussion brought out a demand for bringing local elevators into regional associations, and these into a federation to "do the things that no one regional association can do." More cooperation between terminal agencies, and the speedy interchange of reliable information, were cited as needs.

Education was stressed throughout the business discussion. "We have seen that cooperatives fail where they are set up without education, but are successful where accompanied by cooperative education", said a North Dakota man. He cited the example of one North Dakota elevator that had paid patronage refunds and interest on its shares every year from 1916 to 1931, and still was getting only 18 percent of the grain grown in the community. An educational campaign was launched and the proportion of the grain of the community handled by this elevator jumped to 73 percent.

FROM cooperative producer to cooperative wearer will be a single step, as the Ohio Farm Bureau announces plans to distribute women's coats made by the Workers' Aim Cooperative, which has its factory in Hightstown, N. J., and its designing offices in New York City. Direct distribution by one co-op organization of the other's product, it is hoped, will mean savings to Ohio farm women and better business for garment workers at Hightstown. Women members of the Ohio Farm Bureau board of trustees, along with executives of the Bureau, recently visited the factory. The advisory board of the Workers' Aim Cooperative includes several nationally known farm cooperative leaders.

Twenty-eight trucks and 48 trailers of the Dairymen's Cooperative Creamery of Boise Valley, Caldwell, Idaho, cover all the highways within a 25-mile radius of the plant, bring in milk and cream from the co-op's 3,400 members.

MILK PRODUCERS and the Cooperative Way

Cooperatives take over the job of finding markets and protecting prices for 2 out of every 5 quarts farmers produce. Their achievements and problems are explored in this fifth of our series on "Milk for Millions"*

MILK producers are America's most enthusiastic cooperators. In all 750 thousand of them are banded together in 2,300 dairy cooperatives. They sell 2 out of every 5 quarts of milk sold in America. They own creameries where they make more than 1 out of every 3 pounds of butter churned in the United States, and 1 out of every 5 pounds of American cheese is processed in cooperative cheese factories. The cooperative milk business is Big Business—440 million dollars' worth of business in the marketing year 1934–35.

First dairy cooperatives were cheese cooperatives. They first appeared in the early days of the Republic, soon after the year 1800. Farmers saw quickly that efficient cheese making required larger quantities of milk than one farmer could produce, that the time and labor of cheese making could be reduced if they combined and made their cheese in one place at one time. At their peak, in 1926, there were 751 cooperative cheese factories. Since then this number and the share of the cheese-making business by cooperatives have been reduced. By 1934, however, there were 660 cheese co-ops, and their share of the total cheese production represented 22 percent.

Concentrated in Wisconsin where two-thirds of all United States cheese is made are two-thirds of the cooperative cheese factories in the United States. Ranking next are Minnesota, Illinois, and New York.

Cooperative cheese factories are usually small and depend upon the farmers in the immediate vicinity for support. They operate on a pool basis and usually divide the factory's receipts among the farmer members once or twice a month. Building and equipment are usually simple.

Most small local cooperatives are federated into regional cooperative selling associations. These regional associations market the cheese on consignment under a cooperative brand, and in addition usually bring to the farmer technical advice and assistance. Largest of the regional cooperatives operates in Wisconsin; another sells Wyoming-made Swiss cheese; still another on the West Coast operates 18 factories, assists members by auditing their books.

Butter is another cooperative byword among the dairy farmers of Minnesota, Iowa, and Wisconsin.

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*Earlier sections of this series appeared in the Aug. 9, Aug. 23, Sept. 6, and Oct. 18, 1937, issues.

One out of every 4 pounds of butter made in the United States is churned cooperatively in these three States. Other States claim many butter co-ops. Throughout the country there were in 1934 almost 14 hundred cooperative creameries. Altogether they churned 600 million pounds of butter that year, and totaled 170 million dollars in butter sales. About 2 out of every 5 pounds of butter made in 1934 were cooperatively made.

Cooperative churning started in the United States shortly after the factory method of making butter was introduced, but cooperation did not catch on until about 1900. Cooperative churning developed side by side with the modern sales technique and the growth of huge city markets. Today one cooperative selling agency markets 80 million pounds of butter a year, the output of 400 creameries in Minnesota, North and South Dakota, and Wisconsin. This cooperative takes butter from local cooperative creameries on a consignment basis, has the butter graded, then sells it throughout the United States under a cooperative brand. Other regional cooperatives operate on the West Coast and in the South.

Dairy cooperatives generally may be divided into cooperatives that do and do not process milk. Butter and cheese cooperatives fall into the first classification; fluid milk cooperatives usually fall in the second.

Butter and cheese cooperative progress has been even and quiet, exciting only in its cooperative implications. But fluid milk cooperation has been erratic in its development, spotted with strikes and open conflicts. Resistance to these bargaining co-ops has been powerful and bitter. Most of them attained maturity only after a long up-hill fight.

Fluid-milk cooperation appeared in the United States in the 1880's. First New York cooperative was established in 1882; Philadelphia's first in 1883; Chicago's first cooperative was established in 1887; Cleveland's in 1887; Pittsburgh's in 1889; Baltimore's in 1899. Distributors, at the beginning, unanimously refused to deal with these early cooperatives. To force attention to their demands, milk producers in New York soon struck, stopped shipping milk to markets and thus gained recognition. But the distributors later broadened their markets, went farther afield for their milk supplies, and soon had control of the market again.

Until 1916 most fluid-milk cooperatives were weak and did little more than keep the cooperative idea alive. But by 1916 the European war was affecting its American prices. The clamor of warring countries for American goods and supplies sent prices soaring. Milk producers found that, though they were paying higher prices for everything, they were still getting low pre-war prices for their milk. Dairy farmers looked around and saw that labor, in a similar position, was striking. They, too, turned to the strike to get higher prices for their milk. The year 1916 saw milk producers' strikes called in New York, Chicago, Pittsburgh, Boston, and Cincinnati. Pittsburgh's strike was called off before it went into effect when the distributors yielded and granted the producers' demands. Chicago strikers lost in the spring, struck again in the fall and won. Both the New York and Boston strikes were won by the producers. In Cincinnati the strike was lost when the health department, unsympathetic toward the strike, waived all health regulations, permitted distributors to buy milk where they could, sell it as they pleased. In Philadelphia, though, there was no strike; the widespread dissatisfaction of dairy farmers led to the establishment of a Tri-State Milk Commission, which studied the milk problem, awarded higher prices to farmers, and laid the ground work for a more complete understanding of the economics of milk.

This Indiana receiving station where milk is being weighed and samples are being drawn for butterfat testing is typical of many such stations scattered through the milk-producing areas of the North Central States.

America's entry into the war in 1917 transformed the American scene entirely. Loose, sometimes inefficient, competitive practices were pushed aside to make way for coordinated utilization of American resources. American consumers went on rations, and the rationing process extended all the way back to the first processes. Not only was food rationed to consumers, supplies and labor were rationed to industry and farmers. The Food Administration, confronted with the titanic problem of organizing food distribution in America, made it known immediately that it did not have time to deal with individual dairy farmers; it told them frankly that if they wished to be heard they would be heard best if they organized into cooperatives. As a result, milk producers flocked into cooperatives, and milk distributors, who had been hitherto reluctant to deal with organized producers, had to deal with them. While there had been only 14 milk producers' cooperatives in 1914, by 1919 there were 71.

Winning the war was easy, however, compared with the problem of getting rid of the effects of the war. Long after the shrapnel stopped hissing, after the guns had been

In this office the Twin City Milk Producers' Association of St. Paul, Minn., keeps books for its 8,000 members whose sales run to over 8 million dollars a year. Last year, at 13 plants within a 40-mile radius of this office, the cooperative association handled 350 million pounds of milk for its members.

wrapped in tarpaulins, after the armies of men had stood at attention for the last time, the war remained with the world. Production which had been increased in the United States to meet war demands could not be decreased simply because the war was over. Output continued to meet wartime needs while prices catapulted down because of a lower peacetime demand.

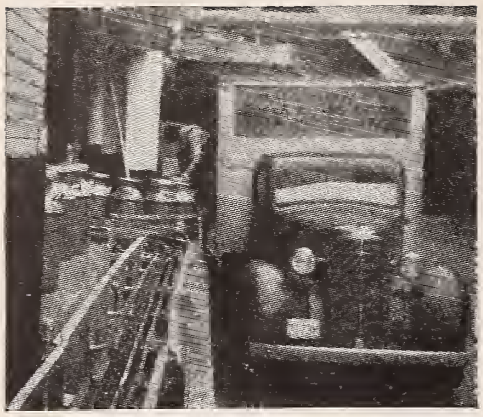
In this confusion some milk distributors sought to take advantage of falling prices to break milk cooperatives, thought that in this way they could restore their pre-war domination of fluid-milk markets. Farmers banded together in their cooperatives, retaliated with strikes. Prosecutions under antitrust laws were instituted against milk cooperatives in Chicago, New Orleans, and Minneapolis. Finally, the cooperatives won through. In 1922 the Capper-Volstead Act gave farmers leave to combine to bargain for prices without interference from antitrust laws. Then, with the last obstacle won over, fluid milk cooperatives settled down to a steady growth. By 1935 there were 200 thousand farmers in 185 fluid milk cooperatives in the United States. These cooperatives sold 239 million dollars' worth of milk in 1934, two-fifths of all the milk sold in the United States in that year.

Fluid milk cooperatives differ in their activities from city to city. The largest fluid milk cooperative, operating in New York State, sells milk for its members, receives payment for the milk from the distributors, pools the money it receives, and then prorates this money among its members. In addition, it also processes some milk. In some cases it undertakes to distribute milk to consumers. Financed by service charges based on the amount of milk handled for each member, this cooperative in 1929 had 37 thousand members in 6 States. It operated 238 milk processing plants, and almost 1 billion pounds of milk passed through its hands in that year.

Such an organization is no simple neighborhood affair. It is an intricately organized enterprise that compares with the largest companies in America. To run this vast cooperative enterprise the milkshed is divided into 24 districts. Each district elects one representative to the cooperative's board of directors. Districts are divided into subdistricts, each having a president who attends directors' meetings without the privilege of voting. Within the subdistrict there are locals, 800 in all, each one of which is a separate corporation and its own articles of incorporation and its own officers. Subdistricts and locals are financed by the main office. One-tenth of a cent for each hundred pounds of milk shipped from the subdistrict is allotted to it. Two-tenths of a cent for each hundred pounds of milk shipped from the local is allotted there.

So vast an enterprise is the exception rather than the rule among fluid milk co-ops. Nor do all such associations own facilities for processing milk. More characteristic is the cooperative which handles no milk at all but takes over for its members the onerous and highly technical job of bargaining for prices. Today the farm price of milk is negotiated not simply between a single farmer and a large, powerful distributor but between a representative of farmers and the distributor.

Out of this job of representing farmers in negotiations over price have grown other protections which the cooperative provides its members. Cooperatives attempt to guarantee farmers against loss from short weight or dishonest testing by having farmers' representatives check weights, quality, and butterfat content of milk delivered by members to distributors' plants. By creating reserve funds, individual farmers purchase insurance of payment for their milk, no matter what happens to the



Falls Cities Cooperative Milk Producers' Association serves 3,000 farmers on both the Indiana and Kentucky sides of the Ohio River who produce for the Louisville market. Last year this association handled 49 million pounds of milk and did a business of $1,681,930.

distributor. Most of the well-directed co-ops demand the right to examine distributors' books to verify the correctness of payments made under the classified price plan for milk—a plan whereby farmers are paid for milk according to the use made of it by distributors. By combining resources, cooperatives have placed technical assistance at the disposal of members who never could have afforded it otherwise.

National trade body for the cooperative dairymen in the United States is the National Cooperative Milk Producers Federation. This organization represented in 1929 about 300 thousand dairy farmers in 45 large cooperatives. It employs a full-time secretary in its offices in Washington, D. C. There it collects information of interest to dairy farmers, disseminates it throughout the country. It is the eyes and ears of dairy farmers in Washington, advocates legislation favorable to dairy farmers, opposes unfavorable legislation. It testifies before Congressional committees on pending bills, before the Interstate Commerce Commission on freight-rate changes, and before the Tariff Commission on the dairy farmer's position regarding tariff regulations.

Milk, butter, and cheese have their cooperatives. But the problems of milk, butter, and cheese do not end with producer organization. Organization provokes problems of its own. The Federal Trade Commission studied in 1935 and 1936 eight milksheds—New York, Philadelphia, Baltimore, Boston, Connecticut, Chicago, St. Louis, and the Twin Cities, St. Paul and Minneapolis. Summarized in this report is that Commission's evaluation of fluid milk cooperatives.

"Producers' cooperative organizations", the report says, "in the areas investigated have greatly improved conditions in dairy farming and have probably obtained better prices for milk than the producers could have obtained without such organizations. However, some weaknesses were found among cooperative organizations. . . . Such organizations have not represented a sufficient proportion of milk produced in a particular market. . . . In several instances the management of cooperative organizations was obviously under the influence of distributors. . . . A large cooperative association had no written contract with distributors. . . . The cooperative failed to obtain the right to verify the reports submitted by the distributors as to the quantities sold or used in the several classes. . . . Producers in that market were underpaid. . . . Dissatisfaction has arisen among certain producers because the cooperatives have failed to furnish members with clear, concise, and accurate information as to the disposition of milk. . . ."

Whatever their weaknesses or strength, dairy cooperatives are a major factor in the great human problem of getting a decent living for farmers and adequate milk supplies for millions of consumers.

Anoka (Minn.) plant of the Twin City Milk Producers' Association, purchased by the cooperative in 1921 and several times enlarged since then, has a capacity of 40 barrels of dry skim milk a day.

SHOULD CONSUMERS UNITE?

[Concluded from page 12]

Higher retail prices may often be justified in particular cases and in particular amounts. At certain times and places they may be the only means of bringing about the increased production which we want. Organized consumers will face these practical realities, but at the same time they will not let us fall into the trap of trading among ourselves an ever larger number of producer dollars for an insufficient and wholly inadequate volume of consumer goods.

In the bargaining between producers and consumers, both of them organized, consumers will have to look such facts in the face. They will have to learn the meaning of price changes very thoroughly, and how to relate particular price and wage and income facts to the larger trends of income and production which determine their standard of living.

Governments spend literally millions of dollars a year for the very valuable and proper purpose of getting facts. Much of the general information assembled is of consumer value, of course, but we know far less than we should about a great many particular questions relating directly to our consumer problems.

Such is the case for organized consumers: collective action by consumers armed with the facts; equal in bargaining power to producer organizations on the other side of the transaction; ready to discharge effectively their obligation to consumers and their responsibility to the commonwealth.

With equal power on both sides, balance may be maintained, preventing excesses on either side. The temptation of producers to cut their own consumer throats by adopting monopoly tactics will be resisted because organized consumers will not permit it. The temptation of consumers to force prices down to sweatshop levels will not prevail because all kinds of producers will be organized and will prevent it.

If consumers go ahead on these lines, it must be on a basis broad enough to represent all consumers. Wage earners and farmers and all people who work for a living stand most in need today of their producer organizations. But they are also consumers. Together they comprise the great majority of consumers, and they are the people who stand most in need of effective consumer protection. If the consumer movement is to occupy a leading place in national affairs, farmers and wage earners should have a very large part in it.

STUDY QUESTIONS FOR THIS ISSUE

1. What four facts about blankets should consumers who want to buy wisely know before they buy?
2. How much wool must a blanket labeled as "all wool" contain?
3. Do two blankets with the same percentage of wool always have the same warmth?
4. Why are blankets "napped"?
5. Why is information on the weight of a blanket useful?
6. How should blankets be washed?
7. Which blankets sold in your stores carry the most informative labels?
8. When are Mandarin oranges most plentiful on the market?
9. How many different kinds of services do producers' milk cooperatives perform?
10. Why do farmers organize cooperatively for handling their milk problems?

OUR POINT OF VIEW

The CONSUMERS' GUIDE believes that consumption is the end and purpose of production

To that end the Consumers' Guide emphasizes the consumer's right to full and correct information on prices, quality of commodities, and on costs and efficiency of distribution. It aims to aid consumers in making wise and economical purchases by reporting changes in prices and costs of food and farm commodities. It relates these changes to developments in the agricultural and general programs of national recovery. It reports on cooperative efforts which are being made by individuals and groups of consumers to obtain the greatest possible value for their expenditures.

The producer of raw materials—the farmer—is dependent upon the consuming power of the people. Likewise, the consumer depends upon the sustained producing power of agriculture. The common interests of consumers and of agriculture far outweigh diversity of interests.

While the Consumers' Guide makes public official data of the Departments of Agriculture, Labor, and Commerce, the point of view expressed in its pages does not necessarily reflect official policy but is a presentation of governmental and nongovernmental measures looking toward the advancement of consumers' interests.

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to make money count most in warmth and wear.

Check Your Vitamin C 7

Richest source is citrus fruit, and oranges are tops among citrus fruits for this valuable nutrient that helps bodies to resist fatigue, loss of weight and appetite. Market forecasters predict a banner winter for oranges, with millions of boxes more than average coming to market. Here are some facts about "kid-glove" oranges—tangerines to you—on markets from November to January.

Should Consumers Unite? 9

Consumers' Counsel D. E. Montgomery sums up the case for consumer organization.

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Cooperatives take over the job of finding markets and protecting prices for 2 out of every 5 quarts farmers produce. Their achievements and problems are explored in this fifth of our series on "Milk for Millions."

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CONSUMERS' Guide

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Jibes about leaf raking have died away, but mystery to some people still hovers about the jobs which some WPA workers have been doing for a living. The gigantic inquiry, described in our lead article in this issue, was possible only because of WPA and the quality of people on its lists. Seven thousand of them, all unable to find jobs in private industry and all certified for WPA employment, were put to work on this survey. Few of these people had had training in research, but they were intelligent and eager to learn new techniques. After a month's training under expert Government economists, a large number of them were sent out to gather the basic facts. For months they made the rounds of households selected for the study; tactfully and tirelessly they explained the reasons for their questions; carefully and methodically they recorded the answers to their questions. Other workers, stationed in the central clearing pools, received training in the operation of tabulating machines and other routines of statistical analysis. . . . One of the byproducts of this undertaking, and not an unimportant one, is the interest that private industry has taken in many of these workers who have been pulled off their WPA jobs and given regular employment. In fact, directors of the survey seem to have trained their personnel so well that they are now forced to congratulate many of their best workers on getting work elsewhere, while the directors have to put up with the inconvenience of training new people to put the finishing touches on their survey.

Almost every mail brings us a plea from some consumer for a road map to the study of consumer problems. Not dearth of material but not knowing how to use material available troubles other consumers. On page 7 we toss out some suggestions for group study plans. As additional starters, here are a few publications that blueprint useful explorations into consumer problems and their solutions:

Consumer Buying—Suggestions for Group Programs, by the American Home Economics Association and the Bureau of Home Economics of the U. S. Department of Agriculture. 1936, pp. 40. Address: American Home Economics Association, Mills Building, Washington, D. C. 25 cents. Discussion with lists of reference material on consumers' aids in the present market; and the buying of food, textiles, clothing, cosmetics, household equipment, dry-cleaning and laundry services.

Questions Facing Consumers, A Guide For Discussion, by Benson Y. Landis. 1936, pp. 24, illustrated. Address: Eastern Cooperative League, 112 Charlton Street, New York, N. Y. 10 cents. Brief introduction to 10 important questions facing consumers, to points of view concerning them, and to kinds of action being taken in these fields. Brief reference lists are given for each question.

Scientific Consumer Purchasing, by the American Home Economics Association Committee on Standardization of Consumers' Goods. 1935, pp. 64. Address: American Association of University Women, 1634 Eye Street NW., Washington, D. C. 60 cents. This pamphlet and a packet of other reprints and bulletins make up a Study Kit on Consumer Problems which sells for $1.25. Discussion and reference material on sources of buying information, and the buying of hosiery, blankets, sheets, and canned food. Other topics treated are consumer purchasing and planned production, terms used in designating grades and qualities of commodities, and legal safeguards for food, drugs, and cosmetics.

A Study Plan for Consumer Groups, by the Consumers' Counsel Division. 1937, pp. 12, mimeographed. Address: Consumers' Counsel Division, Agricultural Adjustment Administration, Washington, D. C. Free. Sets up eight questions for group discussion based on reference material in the Consumers' Guide.

We Consumers. *Building America,* Vol. 2, No. 6. 1937, pp. 32, illustrated. Published by the Society for Curriculum Study with the cooperation of Lincoln School and Teachers College, Columbia University, and United States Works Progress Administration. Address: Building America, 425 West One Hundred and Twenty-third Street, New York, N. Y. 30 cents. A concise survey of general consumer problems. Profusely illustrated.

Leading a Study Group in Consumer Purchasing, by Millicent Yackey Taylor. Journal of Home Economics, Vol. 28, No. 5. May 1936, pp. 289–295. Reprints available from American Home Economics Association, Mills Building, Washington, D. C. 10 cents.

[*Our cover picture is by courtesy of Ellis and the Washington Post*]

Discovering

THE AMERICAN CONSUMER

Government experts and WPA workers join in the search for a picture of the spending habits of the modern consumer*

CONSUMER Mystery No. 1 is on its way to a solution. For 150 years economic detectives have been seeking accurate clues as to what the American consumer is like, how he earns and spends his money, what are his satisfied and unsatisfied wants. Thanks to the biggest research job ever undertaken on this mysterious but vitally important person, the Government will soon be able to sketch the most complete outline ever had of the person around whom all economic life revolves.

Only in limited ways have economists been able in the past to describe American consumers. Many surveys have been made, but those of necessity were inadequate as a basis for generalizing about 130 million people. Usually they have been restricted to a few thousand families. They have dealt mostly with certain well-defined income or population groups. This limited their usefulness in showing who the American consumer is and how he acts.

Nine years ago some economists, sociologists, and marketing experts gathered around a conference table at the call of Dr. Ray Lyman Wilbur, then Secretary of the Interior. Their announced purpose was to plan an inquiry into the "Economic and Social Well-Being of the American People." As their starting point, the conference posed two fundamental questions: "How much do people earn?" and "How do they

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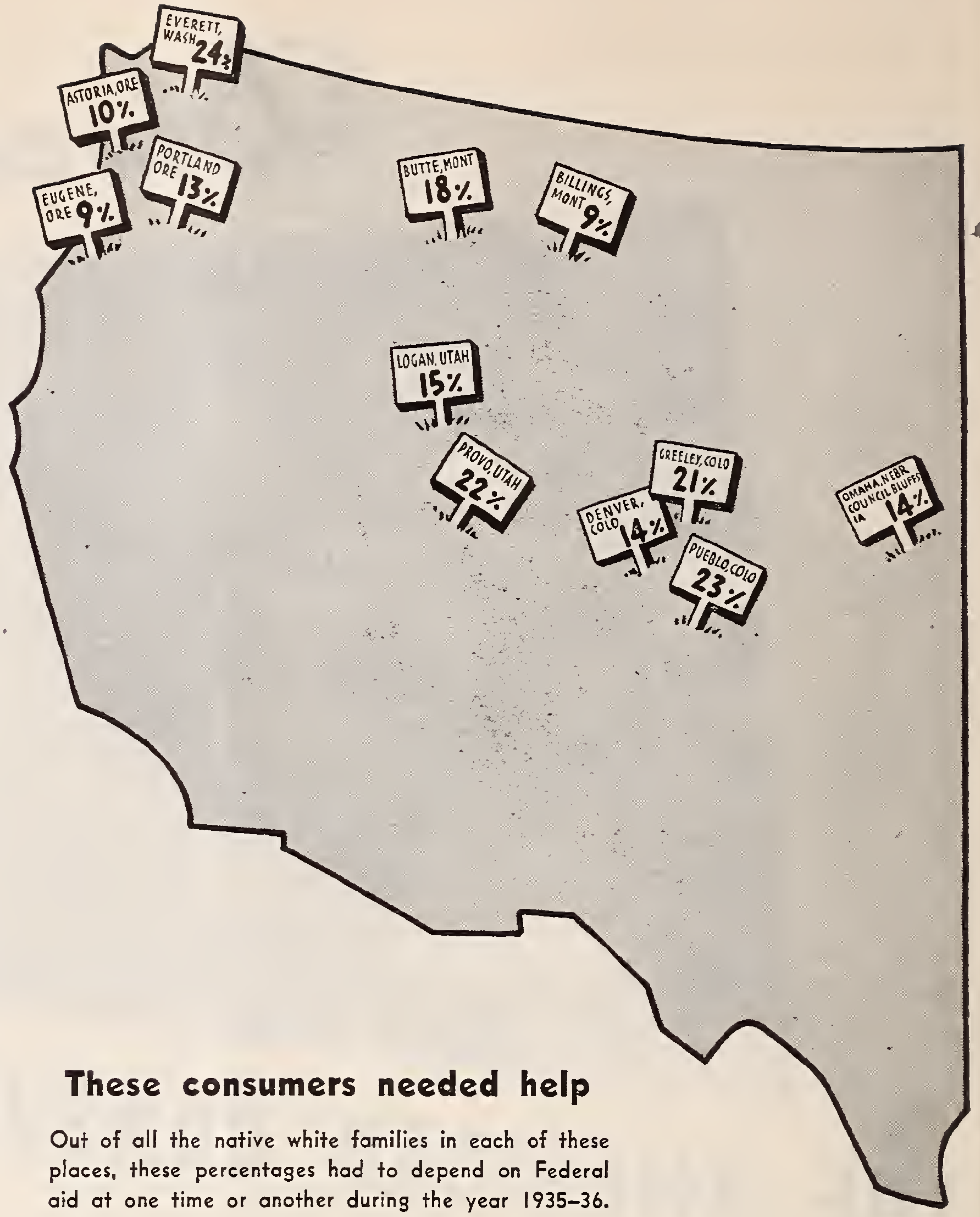
**In this article we give background facts about the consumer purchases study. Watch later issues of the* CONSUMERS' GUIDE *for the important findings of this study.*

spend their money?" A year later—in 1929—the inquiry had developed to the point where the group had drafted "A Plan for the Study of Consumption According to Income." That was the starting point. The next 5 or 6 years were given over to finding ways and means for launching this ambitious exploratory investigation. Not until the Works Progress Administration came along, with its thousands of able but unemployed clients needing work, was an agency found which could give this research job the staff necessary to undertake it.

It was a gargantuan undertaking, this plan to study American consumers, absolutely unlike anything in the way of consumer surveys previously attempted. Back in 1888, the Bureau of Labor Statistics made the first consumer survey when it investigated family expenditures among workers in the iron and steel industry. The United States Department of Agriculture has been making studies of regional farm and village families periodically since 1890. In 1919, the Bureau of Labor Statistics completed what was then the largest consumer study ever undertaken. It included approximately 12,000 families of wage earners and lower-salaried clerical employees. The results of that survey were used as the basis for the official cost-of-living index for 18 years. Another survey was begun in 1933 and 1934 by the Bureau of Labor Statistics for the purpose of revising its cost-of-living indexes but again limited to wage earners and lower-salaried clerical workers in cities.



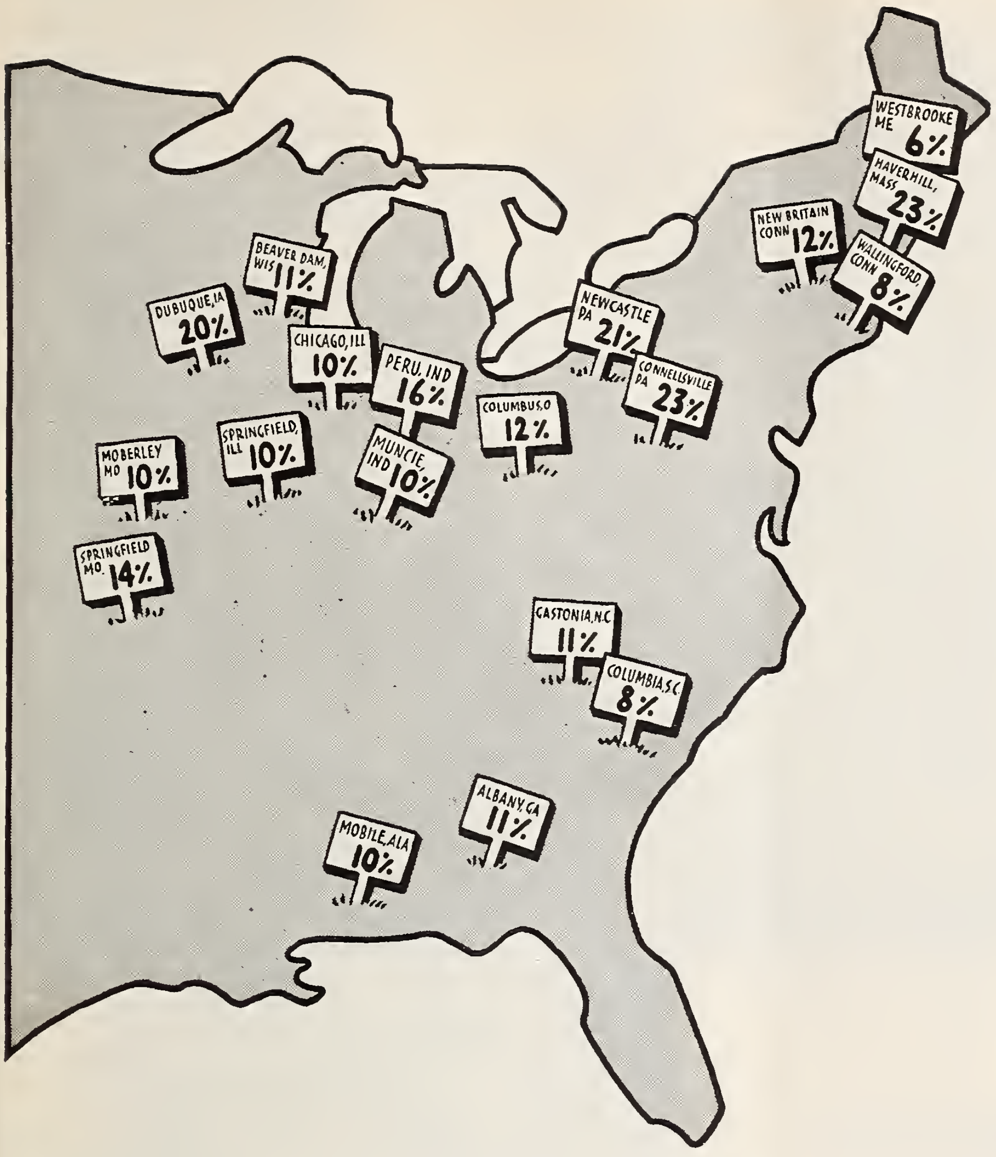
These consumers needed help

Out of all the native white families in each of these places, these percentages had to depend on Federal aid at one time or another during the year 1935–36.

What the experts, called together in 1928, were after was a statistical picture, so complete that it would make possible a comparison, if desired, of the income of a farmer in the hinterlands of Connecticut and the income of a modern cliff dweller high in one of the skyscraper apartment houses on Chicago's Gold Coast. They wanted data that would show the kind of living in terms of goods and services which Colorado has as compared with a similar family in Georgia. Does a professional man in Eugene, Oreg., make as much on the average as one in Muncie, Ind.? And does he spend proportionately the same amount on food, clothing, housing, an automobile, a radio, and such things?

How about wage earners? Clerks? Merchants? What kind of consumers are they? How do the spending habits of consumers in one geographical area compare with those in other places? How big are their families? What does a large family—as contrasted with a small one—do with its money? How many families own their homes? Those were a few—a very few—of the million and one questions, the answers to which could be found only in an intensive Nation-wide canvass of consumer purchases.

Five Government agencies banded together in 1935 to cooperate in compiling and analyzing the immense amount of data to be collected in this new superstudy. Funds came from the Works Progress Administration, which agreed to supply WPA workers in whose hands the actual job of interviewing was placed. Direct supervision was in control of the Bureau of Labor Statistics and the Bureau of Home Economics.



The National Resources Committee and the Central Statistical Board acted in a cooperative capacity, assisting with plans and with the coordination of the work. Guiding the whole project and setting up policies was a committee composed of high executives in each of the five agencies.

Long before any scouts took to running down actual facts about consumers, careful planning had to be done at headquarters in Washington. To reach all of the 130 million individuals in the country was obviously impossible. So the investigators sought a compromise. They searched for a good cross section of the country which would faithfully reflect facts on income and expenditures for the entire country. To arrive at this, not only would they have to select families residing in representative geographical areas of the country, they would also have to see that the selected families would be typical of all the varying degrees of economic comfort found from north to south and from east to west. And families of all sizes and makeup would likewise have to be surveyed.

Six representative sections of the country were portioned out as the basic investigation areas. Investigators were to go into industrial New England, the highly industrialized East Central area which also included large farms; the relatively unindustrialized Plains area, with its grain and livestock-raising districts; the Rocky Mountain region with its mining and cattle raising; the Pacific Coast; and the "Old South," where Negroes form from 29 to 85 percent of the population.

Saving and spending habits of consumers are conditioned by where they live, so there had to be, in addition, what might be termed a "population breakdown"—that is, a scientific study of areas according to size and population. Accordingly, the committee planning the survey selected 2 metropolises; 6 large, 14 middle-sized, and 29 small cities; 140 villages; and 24 farm sections, embracing 66 counties. Actual communities designated for the study were chosen because they were found to be most representative of their respective geographical areas, and of similar areas throughout the country at large.

Consumers come singly, of course, as well as in families. Since this was a "consumer purchases" study, and not just a family study, one of the first tasks of the investigators was to turn their spotlight on the family makeup, as it were, of the Nation. With the help of the general census and of random sampling, they got a good measure of the number of single people, of families of this and that size. Intensive work on income and outgo centered on families with husband and wife, both native born, who were living together. With background facts on the overwhelming proportion of these families to total population, their importance in the whole picture of consumption can be measured.

A family of husband, wife, and a child 10 years old, not only spends different amounts but different proportions of its money for living essentials than the family with husband, wife, and three children. To discover how incomes and expenditures vary as the size and ages of families vary, investigators planned to secure figures from families of each type.

Different kinds of jobs both produce different incomes and make different demands on the family exchequer. So plans were laid to get data on the kind of work the chief earner did for his living. Wage earners, clerks, professional people—all kinds of workers were subjects for the friendly inquiry of the economic scouts.

Nor were families overlooked who are forced to depend on relief for part or all of their income. Relief families were investigated only for the purpose of determining their income. No records were made of the way in which they spent their money.

Plans laid, the surveyors determined on 300,000 families for their "random sample" from which they would seek facts on *income*. These were selected from the six designated geographical areas. City directories and similar types of indices were thumbed over by the experts to select the actual families to be approached. Investigators were dispatched into towns and cities. They went into the slum areas and into the exclusive residential districts.

At each house at which they called, they asked such questions as these: How many are in the family; boys or girls; how old are they? Any boarders or roomers or paid help living in the house? How much money came in during the year; how much of it came from outside the home; how much from earned and how much from unearned income; how much from roomers and boarders? Rural families were helped in figuring out the value of the home-produced food as a part of their income.

Questions on home ownership came next. Did the family live in a rented house; how much did they pay for it? If the family owned its house, what was its monthly rental value; was the home mortgaged; what was the interest on the mortgage? What kind of dwelling place was it: A one-family house, an apartment, rooms?

What kind of occupations did the gainfully employed members of the family have during the year? What were their rates of earnings; how much time during the year were they employed?

With these—and allied—facts on family composition, income, home ownership, and occupations carefully recorded, the surveyors moved on to the next problem: the measurement of expenditures.

Here they were more selective. The 300,000 families were scaled down to some 50,000 to be questioned as to their spending. These were selected after careful and painstaking study of the preliminary questionnaires.

Questions here ranged all over the family account book. What were the family's food costs, at home, and outside the home? What did school lunches cost the children; how much did the family pay for meals when they went on vacation; did they get any food gifts; what was the value of the food which the family raised for its own use? And so on.

As detailed questions were posed on clothing; on automobile and other transportation costs; on household operation expenditures; on recreation; medical care; personal care; education expenditures. A record was made of the family's gifts to community welfare, of the taxes, union dues, and other occupational expenses it had. All the way through the scores of goods and services which are the stuff of living, the questioners led each family and then listed the answers.

Quantity measures of family income and outgo are, of course, only the crudest yardsticks of a family's welfare. What we want to get at is how adequate or inadequate are the goods and services received for a decent living. Scientists, so far, have been able to work out quality standards for only one item—food—in the family budget. To be able to apply these qualitative standards to food expenditures, the surveyors mapped out a still more intensive study of family food consumption.

Some 3,000 families from the 50,000 above, were selected for this part of the survey. They were asked to keep accurate records of their food consumption over a period of a week. Cooperating on a purely voluntary basis, these housewives agreed to weigh every ounce and drop of food consumed during the 7-day period. From the results of these records will come facts never before available about the national diet. Already Government research experts have begun to compile the final results of the diet studies and soon will be able to reveal what quality of diet the average American consumer now buys.

Thus the general plan of the program was whipped into shape. The next problem was to get the gigantic machinery of the survey clicking. The Bureau of Labor Statistics of the Department of Labor was assigned the job of surveying the urban areas, while the rural areas and some of the small cities were placed in the hands of the Bureau of Home Economics of the Department of Agriculture. The actual process of surveying, of course, was fraught with difficulties of all sorts. Not even the best laid plans could succeed without first gaining the confidence of housewives. Interviewers had to be trained (each one went through a month's course before he started on his rounds). Machinery for compiling results had to be set up. These, and hundreds of similar problems, were met and solved. The hour for the opening gun had arrived.

When that "gun" sounded, somewhat over 7,000 WPA workers went forward on their information gathering. The more skilled spent from

[Concluded on page 18]

This group of consumers uses the CONSUMERS' GUIDE in its study circle.

CONSUMER PROGRAMS

For the convenience of chairmen of program committees of clubs and study groups, the CONSUMERS' GUIDE presents a few suggestions for discussion topics. Most of them have been the subjects of interesting and useful discussion in consumers' clubs or councils, adult education groups, or workers' education classes

LET'S get down to cases, club members say. Let's talk about the things we buy.

Last year the Consumer Conference of Greater Cincinnati talked commodities in a series of radio meetings over a local station. Each Wednesday morning from October through March, some speaker discussed the buying of a single commodity—apples, meat, canned fish, dresses, rugs, toys, chinaware, dry cleaning, shoes, and so on down the list.

Sheets are an important item in the family budget. One consumer-minded person in Cincinnati had nine sheets rated by laboratory tests, by consumers, and by salespeople. The sheet which rated highest by laboratory tests was rated fifth by sales clerks, fourth by consumers. It was one of the least expensive. The most expensive sheet was given top rank by salespeople; fifth place by customers; by test it rated No. 3. Evidently price and appearance do not tell the whole story about sheets. But specifications do. And with style a negligible factor in the sheet purchaser's picture, alert consumers can easily learn the meaning of specifications that measure durability, weight, smoothness in sheets.

A discussion leader can quickly read up on sheets in "When You Buy Sheets" (single copies 2 cents, lots of 25 or more 1 cent a copy, from the American Home Economics Association, Washington, D. C.); "Guides for Buying: Sheets, Blankets, Bath Towels," United States Department of Agriculture, Farmers' Bulletin No. 1765, 5 cents, from the Superintendent of Documents, Washington, D. C.; and "Good Pickings at White Sales," in the CONSUMERS' GUIDE for January 27, 1936.

Sheets might make their appearance on a club program in a little play. "Signs of the Times: A Bargain in Sheets" is the title of a smart sketch that is long in information if short in heart throbs; requires only three characters and about 10 minutes to put on; and is readily available (10 cents from the American Home Economics Association, Washington, D. C.).

This play might serve as an opener to a general discussion on what to look for when buying sheets. Discussion will lead naturally into the kinds of materials and construction that make for good buys—thread count, breaking strength, weight per square yard, percentage of sizing; and, of course, length and width.

Club members might do a little tabulating of stores in their territory that sell sheets with this information on the labels; how many are prepared to supply the information if it is not on their labels; how many give the information in their advertising. Knowing what you want is the first step toward getting it.

Says one noted professor of education: "Day by day, the great mass of people are blundering in their daily habits of consumption. With an inadequate income, they are ignorant of the most economic habits of purchase of food, clothing, homes, and fuel. Economic life makes a fundamental demand which education will increasingly heed in order to restore the 'well doing of everything that needs to be done.'"

There are so many commodities in family market lists about which most consumers think they are not quality-wise that some will have difficulty in selecting the few that can be studied in a consumer short course. One way to pare down the number is to have each club member list all the things she buys during a year, and then number each one according to her notion of its importance in her buying list. The 5 or 10 commodities having the most votes might be elected for discussion.

Consumers are not without allies in their campaign for useful information about the quality of the goods they buy. Ranged on the side of the consumer are some governmental agencies and a few private organizations. A series of programs under the title of "Consumer Buying Aids" would not only make known to consumers who their allies are, but also give them a picture of many governmental agencies that do excellent work despite the fact that the work is not done in the headlines. Both the limitations and powers of these agencies should be realistically examined.

In San Diego the adult education division of the public schools has held two forums under the title of "Consumer Aids in the Present Market." Clubs contemplating the discussion of this subject might well break the subject down into a number of topics.

"Federal Laws Protecting the Consumer" could be the first subject in such a discussion. The Meat Inspection Act, for instance, provides not only an excellent example of effective consumer protection but the history of its enactment is an object lesson in how consumer legislation comes into existence. For the history of the Meat Inspection Act and for a description of how the Meat Inspection Act works, consumers may read "Under the Round Purple Stamp" in the CONSUMERS' GUIDE for February 8, 1937, and United States Department of Agriculture Miscellaneous Circular No. 63, "The Inspection Stamp as a Guide to Wholesome Meat." For other facts on these services of Government, useful sources are the two articles "What Kind of Safeguards?" published in the CONSUMERS' GUIDE for April 19 and May 3, 1937. Consumers who live near a Federal meat inspection office can perhaps secure a meat inspector to speak to them. For the location of the meat inspection center nearest you, write to the Bureau of Animal Industry, Meat Inspection Service, Department of Agriculture, Washington, D. C.

Not all the meat sold in every city is inspected by a Federal inspector. Only the meat that passes in interstate commerce must come under his scrutiny. State and city regulations frequently lay down inspection rules for meat produced within the State. Check with your local department of markets or health commissioner on what rules hold in your community, then check these requirements against the Federal law.

To the Food and Drug Administration falls the responsibility for protecting consumers from adulterated, poisonous, mislabeled, and misbranded food and drugs which pass in interstate commerce. Clubs will find it to their advantage to study the Food and Drugs Act, to have officers from the Food and Drug Administration speak to them, and to discuss the nature of the protection afforded by the law.

Not all consumer laws are sponsored by the Federal Government; many States have food and drug and cosmetic laws of their own. In a discussion of "Legislation for Consumers," one subject might be "Food and Drug Legislation in Our State."

Municipalities play an important part in protecting consumers. Has your city enacted the Standard Milk Ordinance? If it has not, the article "Safeguarding Milk Supplies" in the CONSUMERS' GUIDE of February 22, 1937, is directed to you. Safe milk belongs on your program, not only for discussion but for action.

Some forms of protection to consumers seem so elementary consumers fail to give them a thought—weights and measures, for example. But honest weights and measures require adequate legislation, adequate appropriations, efficient public servants, and, behind these, consumer interest. Consumer groups have found it worth money to them to look into local weights and measures laws and their enforcement.

In Washington, D. C., a chain of gasoline stations was found giving short measure in 23 purchases out of 36, in amounts ranging from 6 ounces to 2 gallons on 5-gallon purchases. But this fraud was not discovered and checked until the Consumers' Council of Washington had seen the need for an increased inspection force for the District of Columbia Weights and Measures Department and backed the necessary appropriation. Immediate result: A saving to consumers estimated by weights and measures officials at $100,000 a year. And this was only one result of the campaign in behalf of consumers and honest merchants.

Compare your local legislation with the model weights and measures law drawn up by the National Bureau of Standards. See what sort of appropriations the weights and measures departments of your city, county, and State are getting to enforce the law. Local weights and measures officials will be glad to explain their work and cooperate with your group. (See CONSUMERS' GUIDE articles on "Checking Your Weights and Measures," November 16, 1936, and "Grocery Clerks Test Their Knowledge," April 12, 1937. The Bureau of Standards model statute is in "Weights and Measures Administration," handbook series of the Bureau of Standards, No. 11; 70 cents from the Superintendent of Documents, Washington, D. C.)

Study the sizes of loaves of bread and cans of food on grocers' shelves; compare the prices of the same food in bulk and in small packages, if you would know how much you are really paying for foodstuffs. Methods of selling, packaging, and labeling for weight and capacity may conveniently be discussed along with weights and measures. "Pennies, Pounds, and Privileges" was the subject of a CONSUMERS' GUIDE article (May 20, 1935).

Wise consumers buy by grades when they can. Today meats, poultry, eggs, dairy products, and canned fruits and vegetables may be purchased by grades established by the Bureau of Agricultural Economics. Throughout the country, Department of Agriculture grading specialists are available for the benefit of producers, packers, and consumers.

A consumer group may set out to discover just how many products can be bought by grade in neighborhood stores. The club may buy a number of samples of canned goods at various local stores and send them in for grading—at a nominal fee—by the nearest of 10 regional offices of the United States Canned Fruit and

[Continued on page 18]

Early morning risers wait for a New York City milk station to open at 6:30. (*Center*) In the first days of New York's experiment, milk was sold at some stations in paper containers. (*Right*) Direct from dealer's wholesale truck to consumers' waiting hands goes the milk.

AN EXPERIMENT

in Milk Distribution

New York City shows how to cut out the frills and cut down the price to bring milk within pocketbook range of low-income consumers *

New York City, 6:30 in the morning. A crowd of neighbors—men, women, and not a few children—chat in front of a store that was vacant last week and still displays an aging "For Rent" sign. Now it is a city milk station.

An immense truck drives up. Quickly the people in front of the station begin to form into a line. The driver and his helper unload tray after tray of milk bottles. They hustle the milk inside. An attendant begins passing it over the counter to the customers. One man tries to wheedle three bottles from him, but

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Earlier sections of this series, "Milk for Millions," appeared in the August 9, August 23, September 6, October 18, and November 1, 1937, issues of Consumers' Guide.

is informed with mock brusqueness that his identification card does not show that he is entitled to that much unless he has acquired a new baby. The women laugh. One gets her three bottles without a word. Evidently she has the required number of children.

At 8:30 a. m. the milk station closes and the last customer goes off with her milk, putting away her newly punched identification card in her bag. Stores begin to open now, but the milk station has closed in time to offer them no competition.

Less energetic milk consumers can have their milk delivered to their doorsteps at 13 cents a quart.* Or they can drop into the corner grocery and buy it at a cost of from 9 to 12 cents. (Most milk sells in stores at 12 cents.) The people who are entitled to buy from the milk station get theirs for 8 cents a quart.

Less energetic and more fortunately fixed consumers must pay the costs of home delivery or the slightly lower costs of store delivery.

These milk stations, with their low cost cash-and-carry system of selling, are the city's method of meeting an emergency. The station described is one of 149 scattered throughout the city. This particular station was "borrowed" by the city from the landlord rent-free. He is looking for a tenant, and when he finds one who can pay, the milk station will have to find another generous landlord with a vacancy. Meanwhile the city saves rent, which means that the landlord, as a taxpayer, is saved some tiny additional tax payment. He also gets his store cleaned up and would just as soon have it put to such good use as have it stand idle.

One attendant provided by the city—usually a WPA worker—punches the customers' cards at the station; another, provided by the distributor, sells the milk. Because the store is open only 2 hours, it isn't necessary to keep the milk on ice. The city's cost for handling the milk is: rent, nothing; service, nothing; accessories, nothing. And like all established dealers, it passes these charges on to the consumer.

Other economies along the line make it possible for dealers to provide the milk handled at these stations. One distributor serves each station, unless the amount of milk sold is too great. A station selling as much as 5,000 quarts may be serviced by two distributors. Economy No. 1 for the dealer, then, is low delivery cost. He can dispatch one truck, carrying a full load, to a station where it is tied up for a short time only. There is no overlapping in delivery. Cutting out the cost of soliciting business and the cost of collections adds Economies No. 2 and No. 3 for the distributor. He suffers no bottle losses because each customer must pay 3 cents for his bottle or bring back the empties for full bottles. Call that Economy No. 4. Add the economies in overhead expenses resulting from using plants at greater capacity and the list totals up to an impressive figure.

Who are the customers? Well, to start with, they are not in the upper income brackets. None drive up in sport roadsters. People bothered by heavy income taxes won't stroll down at 6:30 in the morning to save 10 cents on 2 bottles of milk. But there are a lot of people who will; some on relief, some with jobs.

Take the case of a family with three children, the father still paying off debts incurred during a jobless period of 4 or 5 years ago, the mother recovering from a recent illness, the three growing children in school. Let's say the father is an architectural draftsman but still unable to find employment in his own vocation, due to the fact that the building industry has lagged behind the recovery procession. His emergency employment doesn't pay nearly his old salary, and he can't afford extras in the way of service. But he has an intelligent understanding of the nutritive value of milk for his growing children, and he's willing to walk to the milk station each morning to get 2 quarts for 16 cents, instead of sleeping a few minutes longer and paying a driver 13 cents for only 1 quart.

** Prices in this story are as of November 1, 1937.*

To be entitled to buy from a milk station, this father must first sign a statement to the effect that neither he nor any member of his family can afford to pay the regular retail price for the amount of milk the family needs. He also states the number of people in his family, the family earnings, and the number on welfare or home relief. No inquisition into family finances follows, and no investigation in the absence of complaint or suspicion is made. Anyone who signs this statement receives a numbered identification card, signed by the Commissioner of Public Welfare, which is good for 3 months. Each time the holder buys milk, a hole is punched in his card.

This is no out-and-out charity plan, nor a straight commercially operated method of distribution. It comes between, but much nearer to the second. Milk companies cooperate in it because it provides sure sales to people who would otherwise not be in the market or would not purchase as much milk any other way. For 3 years they have been supplying milk to milk stations. Obviously they are not in business for their health, however healthful their product may be, and they wouldn't go on furnishing milk to the city day after day if this part of their business were running at a loss.

Dairy farmers get a break, too, because the city has increased the market for their product. While no official check is made to see that farmers are paid Class I price for this milk, the margin between the 8-cent retail price and the 6½-cent farm price for Class I milk would seem to be ample to cover the greatly reduced costs of distributors for this business.

The city handles the bothersome business of finding the vacant stores, brushing them up, and setting up boards for counters from which the milk can be sold. It attends to maintaining the lists of customers and handing out identification cards. If there are any charges of abuses, the city tracks them down. Not the least contribution to reducing the cost of this method of distribution comes from the landlords of the vacant premises which are turned to this socially useful purpose.

Are consumers satisfied with this system? Doubtless some of them grumble when the alarm clock rings, especially on cold and wet mornings, but whatever the inconveniences to them, they endorsed it last year to the extent of 32,000,000 quarts. This is an impressive endorsement, even in a city with New York's immense population. Every morning some 35,000 purchasers were taking a walk to buy a daily average of 90,000 quarts.

After 3 years of operation there are many demands for more stations in neighborhoods not yet served. It has been urged that schools should be used before school hours to provide additional milk stations. Of the 149 stations now operating, 99 are in stores used later in the day for the distribution of surplus food commodities to relief families. Fifty are in baby health centers, supervised by the Department of Health and supported by private funds, such as the famous Milk Fund for which so many prize fighters have been knocked out at benefit bouts.

New Yorkers have been educated by 20 years of intelligently directed campaigns to appreciate the importance of milk to health. Knowing the value of milk in the diet and fitting it into food budgets are two very different things. Many budgets just can't be made to stretch to cover anything but the cheapest, most energy producing foods. For some families, free milk has been supplied by charity. But even consumers with thin pocketbooks shy away from that kind of subsidy. For them, New York's compromise plan of making it possible for distributors to pare their costs to the bone and inducing them to pass on the savings in a low price is designed.

Initiation of New York's plan came as a result of an impasse over proposed higher prices. In 1934 New York's State Legislature established a system of milk control—now considerably modified—which gave power to the Commissioner of Agriculture, acting with the advice of an advisory committee and through the offices of an executive agency called the Division of Milk Control, to fix prices to be paid to farmers and prices to be charged by distributors. (The law now does not permit the fixing of resale prices.) Drought later that year pushed up the cost of feed to farmers, who then pressed the Commissioner to increase the prices to be paid to them. They asked for an advance of a fraction of a cent a quart. Distributors claimed that this would force them to advance the price to consumers a full cent. Consumer-minded members of the advisory committee offered evidence to show them 1 cent more on the price of milk would result in cutting down the consumption of milk, because in the poorer districts of the city consumers just couldn't "go" the higher price.

A compromise way out of this jam was proposed and adopted. Producers were allowed an extra half cent a quart, distributors were permitted to step up their price for milk delivered to homes by 1 cent, and "as an emergency measure to afford relief to needy families," a plan was initiated to make milk available to them at 8 cents a quart through the baby health stations. Legislation by the city followed, authorizing the city's health department to supervise the sale of this milk.

When morning broke on the day of the price increase, 53 stations were opened for the sale of 8-cent milk. First day's supplies of some 9,000 quarts disappeared in a flash. More than a thousand people had to be turned away. Next day supplies were increased to 13,000 quarts,

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NEW RULES FOR CANS

Food and drug labeling rules, lately revised, reduce some of the hazards of blindfold buying

When you shop for canned fruits and vegetables, do you ask your grocer for a medium-sized can of peaches and peas, for instance, and let it go at that? Or are you a conscientious label reader?

If you are a label reader, check your knowledge against these questions. Are standard canned apricots peeled or unpeeled? If you buy red sour pitted cherries for a cherry pie, how many pits are you apt to find in the can? Do you know the difference in peas in a container labeled "canned peas" and one labeled "dry peas?" Why do the labels on some canned fruits and vegetables sometimes bear the statement BELOW U. S. STANDARD—GOOD FOOD—NOT HIGH GRADE or BELOW U. S. STANDARD—EXCESS LIQUID ADDED or BELOW U. S. STANDARD—SLACK FILL?

If you know the answers to the above questions you are probably up on the Government requirements for fill of container for canned foods, and standards for canned cherries, peaches, pears, apricots, tomatoes, and peas.

Under food and drug laws all food sold in interstate trade must be wholesome food. All containers must carry a plain and conspicuous statement about the quantity of food in the package and all the information about the food stated on the label must be truthful information.

These are minimum quality and label requirements. Certain foods, such as canned meats and some fish, foods containing artificial coloring, imitation products, and certain fruits and vegetables, have more stringent label requirements. For a survey of label regulations on food products in general, see "What Kind of Safeguards?", Consumers' Guide, Vol. IV, Nos. 4 and 5. This article deals chiefly with the requirements for canned foods and standards for certain fruits and vegetables.

Since the passage in 1930 of the McNary-Mapes amendment to the food and drugs law, the Secretary of Agriculture has had the authority to set up standards of quality, condition, and/or fill of container for each class of canned food, except canned milk and meat products covered by the Meat Inspection Act.

Take the requirements for fill of container first. Until the McNary-Mapes amendment there was no control over the amount of food that had to be put in a can. The only regulation pertaining to amount was that the net weight be stated on the label. If the processor wished, he could use a very big can for a very little food. He could increase the

Behind the scenes in Government laboratories scientists lend their skill to Food and Drug Administration authorities working toward better labels for consumers.

net weight of the can by using a large amount of water or some other packing medium. Even the most diligent label readers could be misled as to the actual amount of food they were getting for their money.

Today, due to the McNary-Mapes amendment the size of can is a much more accurate indication of the amount of food you will find in the can. Cans must be well filled with food, and no more packing medium should be used than is necessary adequately to preserve the food. If the canner has been generous with his packing medium, he must inform the consumer of this fact by stating on the label: BELOW U. S. STANDARD—CONTAINS EXCESS LIQUID ADDED. If he leaves too much empty space in his can, that is, if the air space between the food and the top of the can exceeds 10 percent of the inside height of the container, he must put on his label these words: BELOW U. S. STANDARD—SLACK FILL.

Standards for fill of mushroom containers come in for special consideration. Mushrooms are necessarily packed with a great deal of liquid. In order that the liquid will not be excessive, processors are required to equal every 3 cubic inches of the inside capacity of the container with 1 ounce of mushrooms. Drained weight is determined by draining the contents of the container 2 minutes in a sieve having eight meshes to the inch. The solids remaining in the sieve are transferred to a dish and then weighed.

What do consumers know about the quality and condition of canned foods before they buy them other than that they are wholesome? It depends on the food. Since the passage of the McNary-Mapes amendment, canned peaches, pears, apricots, cherries, tomatoes, and peas must measure up to certain minimum standards. When these products fail to qualify in certain respects, even though they are wholesome foods, they must be labeled: BELOW U. S. STANDARD—GOOD FOOD—NOT HIGH GRADE. That is the general regulation, but certain deviations from the standard set up for each product named are permissible, if the canner states clearly on the label just what the variation is.

Take canned pears as an example. According to the official definition, canned pears are "normally flavored and normally colored canned food consisting of the normal-sized, uniform-sized, tender, peeled, mature, unblemished, unbroken halves of the fruit of the pear tree from which the calyx end and the seed cells have been removed, with or without the removal of the internal stem." The sirup in which they are packed must be 14 percent sugar.

All standard canned pears must meet these conditions or their label must bear the statement: BELOW U. S. STANDARD—GOOD FOOD—NOT HIGH GRADE. If they vary from the standard in one of the following permissible ways, the deviation must be stated on the label. Thus, if the pears are packed in water instead of a sirup, "water-pack pears" must be printed in very plain large capital letters of specified size on the label. The same holds true if the pears are whole, quartered, or are Kieffer pears. If the pears are not uniform in size, the label must tell the consumer this in these words: PEARS, UNGRADED FOR SIZE. According to the standard, uniform-sized fruit means that the weight of the largest unit of fruit in the can cannot be more than twice the weight of the smallest.

When the average consumer buys a can of peaches she expects them to be peeled, mature halves of the fruit which are tender but will keep their natural shape when removed from the can to the dish. These qualities are among those which all canned peaches must have if they are to meet the standard. If they are whole or quartered or sliced peaches, if they are white or freestone peaches or are not uniform in size, if they are packed in water instead of sirup, these facts must be stated on the label.

Standard canned apricots are unpeeled, halved apricots. If you are a consumer who likes your apricots peeled, or if for a certain kind of salad you want whole apricots, or sliced, peeled apricots, then you must ask for them specifically. The label on whole, sliced, or peeled fruit must clearly show the variation from the standard article.

There are two sets of standards for canned cherries, one for sweet cherries and one for red sour cherries. When you ask your grocer for a can of sweet cherries, chances are he will give you a container of whole fruit. Standard sweet cherries are unpitted. Pitted sweet cherries must be specially labeled.

In pitted cherries only one pit is allowed to 20 ounces of cherries. If you see a can of sweet cherries labeled PARTIALLY PITTED CHERRIES—BELOW U. S. STANDARD—GOOD FOOD—NOT HIGH GRADE, it means that the canner has missed a few pits in every 20 ounces of cherries. Twenty ounces, by the way, is about the amount of fruit in a No. 2 can. For cherry pie, red sour pitted cherries are most in demand. If they are to be up to par, only one pit is allowed for every 20 ounces. Otherwise they must be labeled: PARTIALLY PITTED CHERRIES. Sometimes color is added to cherries to improve their appearance. If this is done, the consumer must be told in these words: BELOW U. S. STANDARD BECAUSE ARTIFICIALLY COLORED.

Must tomatoes be peeled before they are canned? Yes, says the Food and Drug Administration.

[Concluded on page 18]

Your Food Supplies & Costs

MEAT supplies during 1938, especially pork and better grade beef, are expected to be larger than this year and lower prices are in prospect. The gain in total supplies is expected mainly during the last half of 1938, when hog slaughter probably will increase considerably. Beef and veal supplies may be slightly smaller than during 1937, but will include a larger proportion of better grade cattle. Lamb supplies most likely will be about the same as in 1937.

Top grades of eggs and beef are selling at a much larger than usual margin above prices for average grades. Supplies of average grade beef and eggs have been relatively large compared with top grade products. Due to large storage holdings, storage egg prices have been considerably lower than a year ago. In October their prices declined instead of advancing seasonally. Prices of higher grade fresh eggs, however, have been moving up and are only slightly lower than in 1936.

Sharpest monthly decline in average retail food costs this year occurred from September 14 to October 12, when prices of all major foods except eggs and dairy products moved down. As a result of this 1-percent decline, the retail cost of the items in the consumer's market basket on October 12 was only slightly above the level reached in February, the "low" for 1937.

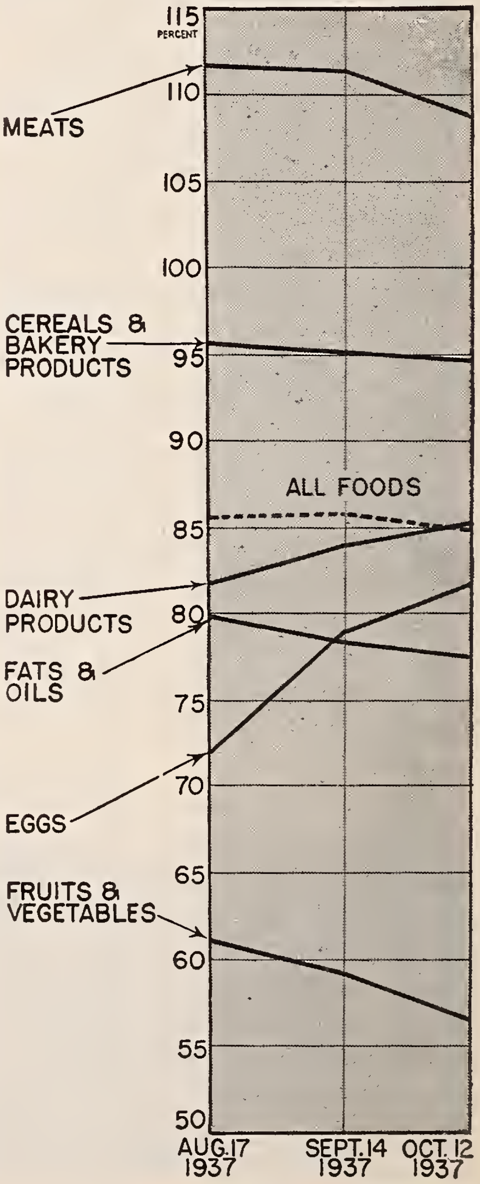
Retail food costs, however, remained above their level a year ago, primarily due to meat prices. On October 12 the index of retail food costs as reported by the Bureau of Labor Statistics was 84.9 percent of the 1923–25 average and 2.5 percent above a year ago. The increase of 15 percent over a year ago in meat costs canceled most of the 16 percent drop in fruit and vegetable prices. Dairy products, sugar, and cereals and bakery products were about 3 percent higher than a year ago, and egg prices about the same amount below.

Meats and fruits and vegetables led the downward parade of food prices during the 4-week period. Prices of all meat items except smoked pork products went down. Sharpest declines occurred in fresh pork and beefsteaks. Lower prices on apples, citrus fruits, and most fresh vegetables pushed down fresh vegetable costs to their lowest level since October 1935. Prices of dried beans and canned vegetables continued to move down from their midsummer's peak, but these items still are above their 1936 level prior to the drought. Lower cornmeal and flour prices were the major factors responsible for the slight decrease in cost of cereals and bakery products.

Food costs dropped in all regions. Sharpest declines occurred in the North Central and Southeastern States and smallest in the far West. The downward movement in the Midwest and South carried food costs below their level a year ago. In all other areas costs were higher than a year ago, but increases above the United States average prevailed only in New England and Middle Atlantic cities.

Fresh vegetable prices generally advance from fall to winter months because supplies are small and either come from distant producing areas or from storage. Prices often fluctuate sharply because heavy rains damage tender winter-grown truck crops. Fresh winter-grown vegetables come from the Southern and Western States. The three staple crops—cabbage, potatoes, and onions—however, move from warehouses in Northern States. First vegetable shipments from the Southeastern States arrived at markets during late October and are expected to increase seasonally. Acreage planted to fall and winter vegetables was

A CLOSE-UP OF FOOD COST CHANGES
1923-1925=100

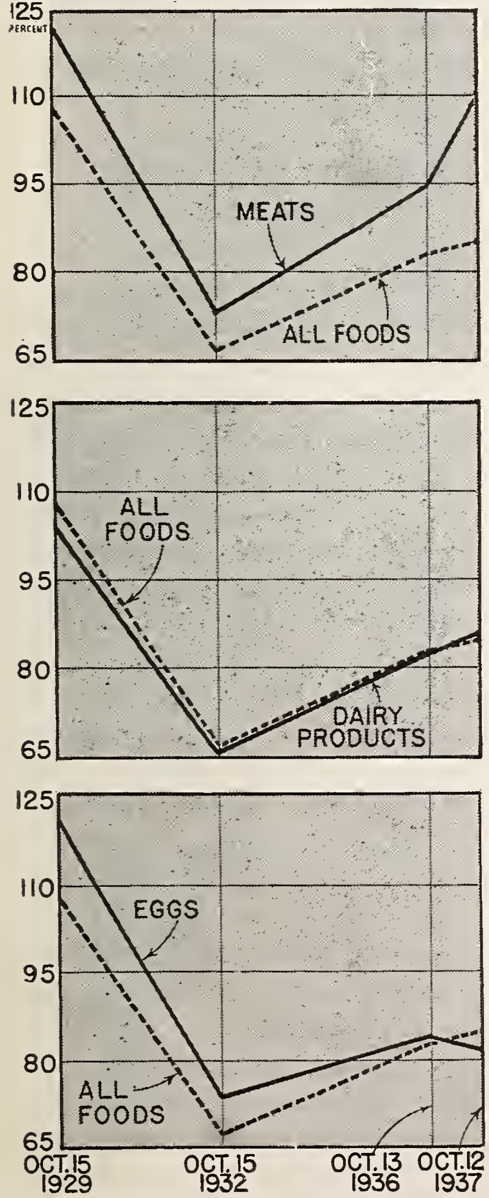


slightly smaller than last year's relatively large acreage and supplies are expected to be slightly smaller.

Orange supplies from November until May are expected to be about a tenth larger than a year ago and the largest on record. During this period practically all Florida oranges and California navel oranges move to market. The increase in the crop is divided equally between Florida and California. Orange prices generally decline from late October until they reach their low point in January or February. Prices during the remainder of 1937 are expected to be about the same as a year ago.

Egg supplies in 1938 are expected to be smaller than during 1937, and prices most likely will average higher. However, during the remainder of 1937 relatively large storage egg supplies will tend to offset the probable decline from a year ago in fresh egg production. Egg prices generally reach their seasonal high point in November. This year's peak is expected to be lower than in 1936.

A PERSPECTIVE OF FOOD COST CHANGES
1923-1925=100



Butter prices probably will reach their season's high point this month and then move down until next spring. Peak in butter prices most likely will be above a year ago and may be the highest since 1930. Milk supplies during the winter feeding period which ends in May are expected to be slightly larger than a year ago with most of the increase after the first of the year. Butter prices, however, are expected to continue above their level a year ago. The effect of larger supplies probably will be offset by consumers' incomes larger than in early 1937 and an increased demand for fluid milk and cream.

Advancing poultry prices are in prospect for the remainder of 1937, and prices most likely will continue higher than last winter. Ordinarily poultry prices decline during the last half of the year as chickens hatched in the spring move to market. High feed prices and low chicken prices this spring caused farmers to reduce sharply their hatchings. This curtailment of fresh supplies has boosted prices, with the sharpest increases in the lightweight chickens.

Beef prices are expected to change only slightly during the remainder of 1937, but the price trend probably will continue downward. However, a larger than usual decline in better grade beef cattle prices is in prospect for the first half of 1938 when larger marketings are in prospect. Since reaching their peak in September, better grade beef prices have declined slightly while much larger decreases have occurred in medium good beef. Supplies of choice and prime cattle still continue to be relatively small. Reduced supplies of better grade beef were primarily responsible for the sharp increase in prices over a year ago. Consumers may find some immediate relief from relatively high prices of better grade beef by shifting to lower priced grass-fed cuts until large supplies of grain-fed beef are available in 1938.

AN EXPERIMENT IN MILK DISTRIBUTION

[Continued from page 13]

and still that was not enough. On the third day 17,000 quarts were sold long before the 2-hour period had passed.

Bulk of the supplies for this trade came from one large company. Other distributors seemed to hold off. When the city announced that the State of Wisconsin had offered to provide all the milk that was needed for station sale, local suppliers appeared to join up less reluctantly. Toward the end of June 1934, 64 stations were in operation and more than 26,000 quarts were being purchased by close to 15,000 families.

Difficulties and worries aplenty lay in the path of this unique experiment, but despite them it went along its uneven way with no major jolt until September 1936. Then the Commissioner of Agriculture issued a new schedule of prices to farmers, stepping up their returns again by a fraction of a cent a quart. No increase in prices to consumers was granted. While some distributors attempted an unauthorized advance of another cent to consumers, they soon were forced by consumer resistance to abandon it.

Pressed at both ends, distributors began selling milk at stations for 9 cents a quart. Promptly the department of health notified these distributors that their regulations permitted them to supervise the sale of milk at a maximum of 8 cents only, and that if an increase was desired they could request a hearing before acting on their own. Until that action the sale of milk must continue at 8 cents.

No request for a hearing followed, but immediately the major distributor to the stations announced its supply of 25,000 quarts would not be available the following morning at this price. By 10:30 that evening the Health Department had secured sufficient milk from other distributors to supply its needs. Since that period the larger distributors have not participated in the station sales, although prices to producers are lower. Smaller companies have gone along. Distribution got up to 90,000 quarts daily.

Does the plan meet with objections? Of course, there have been many, some that merit the closest scrutiny. There have been rumors that the distributors' narrow margin encourages chiseling in prices paid to producers. Some State and city officials doubtless consider the plan a "headache" and fear that it will break down the whole system of State milk control. Retail dealers have complained that it has cut down their sales.

Against these objections is the tangible fact that thousands of families are getting a supply of milk which they could not afford at regular prices. There is the additional fact that it comes closer than most schemes for getting milk to needy families on a commercial rather than a charity basis.

DISCOVERING THE AMERICAN CONSUMER

[Concluded from page 6]

2 to 5 hours questioning housewives, who were never under any compulsion to answer the questions. In some towns, every family was interviewed; in some every other family. In larger cities, such as Chicago, about 1 out of every 10 households was approached. Each schedule, as it was filled out, went to a regional office. There a staff of editors checked and rechecked the information. Any errors were promptly sent back for correction and adjustment.

Next step was accumulation of the schedules at regional tabulation pools. Here the information was boiled down to standard codes through an intricate tabulation system and automatically compiled for averages and aggregates. Finally, the reports for the Bureau of Home Economics were shipped on to Baltimore, and for the Bureau of Labor Statistics to Chicago, central tabulating pools. Final analyses will be made in these Bureau headquarters in Washington.

Rough outlines of American consumers are beginning to emerge from the mass of figures. First conclusions to take shape—but these are still tentative—have to do with consumers' incomes. No one can say yet, because the experts haven't finished their job, "This is the average American Family's income." But significant figures will soon be appearing.

One group we show in the map on pages 4 and 5. The earnings and spending habits of families who must look to public help for even a part of their living are important not only to them but to self-supporting families whose taxes help to carry the load when private industry is not able to give employment. In this map we show the percentage of native white families in each of the communities who received Federal aid at any time during the year covered by the survey. What sort of living they, as well as self-supporting families, got will be part of the story that is to come.

NEW RULES FOR CANS

[Concluded from page 15]

Otherwise they must bear the statement: BELOW U. S. STANDARD—GOOD FOOD—NOT HIGH GRADE. To be up to standard, a can of tomatoes must contain the peeled, cored, trimmed, whole or large pieces of the mature fruit, with or without tomato juice, and added seasoning such as salt and sugar. If the canner wishes to include the extracted juice and pulp from the trimmings in his product, he must put these words on the label: TOMATOES WITH PUREE FROM TRIMMINGS.

When you buy a can of peas, how can you be sure whether they will be immature or mature peas? The Food and Drug Administration has a standard for each. Standard canned peas are the immature, unbroken seed of the common garden pea. Canned *dry* peas are mature peas that have been soaked in water and thoroughly cooked. When color is added to peas the fact must be stated on the label: BELOW U. S. STANDARD BECAUSE ARTIFICIALLY COLORED.

CONSUMER PROGRAMS

[Continued from page 9]

Vegetable Grading Service. (For the addresses of these offices and literature on grading, write the Canned Fruit and Vegetable Grading Service, United States Bureau of Agricultural Economics, Washington, D. C.) Then a tasting party, at which people gather round a table to compare their judgment of quality and the results of grading with prices at which canned goods sell, is always good fun and instructive. (See Consumers' Guide, July 27, 1936.)

A club that is at all concerned with the problems of the consumer will want to see organized consumers in action. Consumer cooperatives now are to be found in almost every section of the country. The club can visit a local co-op gas station or grocery store. Cooperative managers or leaders will be glad to come down to the club and discuss the principles of the Rochdale cooperative movement and how they are being worked out in local practice.

What are the cooperatives doing to guarantee better quality as well as get lower prices for their members? How are democratic principles safeguarded in cooperative organizations?

Then visit one or two local farmers' cooperative societies—which may be concerned with anything from the marketing of milk or grain, to the purchasing of seed and twine—and see what they are doing to standardize and improve the quality of products going to the consumer. A club member might lead a discussion on the relationship between farm producers' and consumers' efforts to raise the standard of living all around. For information on farm co-ops, write to the Farm Credit Administration or your State Farm Bureau or Farmers' Union. For a list of Government publications on consumers' cooperation, see "The Cooperative Bookshelf," prepared by Consumers' Counsel Division, Agricultural Adjustment Administration; 5 cents from the Superintendent of Documents, Washington, D. C.

Credit unions are cooperative thrift and loan associations. A local credit union official, or a representative of the Credit Union section of the Farm Credit Administration, could explain the simple principles of this form of cooperative activity to the group. By way of comparison with the interest rates charged by credit unions to their member-borrowers, one or two club members could report on what actual interest amounts to, on certain types of "easy payments" plans offered consumers. (To learn the whereabouts of credit unions, write the Farm Credit Administration, Washington, D. C., or the Credit Union National Association, Raiffeisen House, Madison, Wis.)

Government agencies are consumers too, but unlike housewives, they do not go out with shopping lists and market baskets to make their purchases. Governments—Federal, State, and city—buy by specifications. Before purchases are made, a testing bureau establishes just what the Government expects of the commodities it intends to buy. Housewives buying sheets feel the material, look at the price, and then, if the price seems satisfactory, make their purchases. But the Federal Government first describes scientifically the kind of sheets it wants. Manufacturers bid on the order in competition with all the other interested manufacturers who make similar sheets. The lowest bidder gets the order. When the sheets are delivered, the Government tests them to see that specifications have been met.

The National Bureau of Standards is the most famous Government testing laboratory. But many States and cities have similar laboratories and follow similar procedures in making their purchases. Universities, too, often have such laboratories. Consumer club members are usually welcome in them. Their directors often will be glad to speak at consumer meetings. "Scientific Buying," then, could be the topic of such a meeting. The CONSUMERS' GUIDE of July 13, 1936, describes the Bureau of Standards. A few pamphlets bearing on this topic are: "Aids for Over the Counter Buyers," "Facilitating the Use of Specifications," "A List of Publications of Interest to Household Purchasers," and "Services of the National Bureau of Standards to Consumers," all obtainable from the Bureau of Standards, Washington, D. C.

Almost every commodity that consumers buy has been the subject of articles, pamphlets, and books. Some of these aim at the trade, some at the technicians, others at consumers. The United States Department of Agriculture, State departments of agriculture, and State universities put out much valuable material. The CONSUMERS' GUIDE Bookshelf has from time to time been listing and briefly describing available study material. On page 2 we list a selected few of the best introductions to the difficult but worthwhile problem of leading a study group in consumer problems. One or several of these will do as starters. The rest follows from the leader's and the group's interests, the nature of local sources of information, and the character of the most immediate local consumer problems.

OUR POINT OF VIEW

The CONSUMERS' GUIDE believes that consumption is the end and purpose of production

To that end the CONSUMERS' GUIDE emphasizes the consumer's right to full and correct information on prices, quality of commodities, and on costs and efficiency of distribution. It aims to aid consumers in making wise and economical purchases by reporting changes in prices and costs of food and farm commodities. It relates these changes to developments in the agricultural and general programs of national recovery. It reports on cooperative efforts which are being made by individuals and groups of consumers to obtain the greatest possible value for their expenditures.

While the CONSUMERS' GUIDE makes public official data of the Departments of Agriculture, Labor, and Commerce, the point of view expressed in its pages does not necessarily reflect official policy but is a presentation of governmental and nongovernmental measures looking toward the advancement of consumers' interests.

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CONSUMERS' Guide

VOLUME IV, NUMBER 18 NOVEMBER 29, 1937

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ON GUARD FOR CONSUMERS

CONSUMERS' Guide

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CONSUMERS' COUNSEL DIVISION
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Two kid shoe manufacturers, a representative of the kid leather industry, and a public official formerly connected with the leather industry have been writing us letters about the article on shoes published in the September 20 issue of the CONSUMERS' GUIDE.

What we said about kid shoes has disturbed them. They question our statements of fact. They suggest an anti-kid bias in our reporting. They ask us to correct "misinformation which is damaging to an important industry."

Directly by letter to each of these correspondents, and now indirectly to other kid shoe manufacturers, we are eager to meet this challenge of our facts and our objectivity in reporting them. To set the record straight, we give here the essential parts of the most specific of the four critical inquiries received:

"In the CONSUMERS' GUIDE of September 20, 1937 (Vol. 14, No. 13), under the heading of 'Your Money's Worth in Shoes,' there appeared a most misleading and unfair portrayal and account on this subject, particularly as applying to kid. The account could not be more biased and apparent if it were written by those tanners competing with the tanners of kid.

"We cite just a few of the deceptive features:

"Page 4—Photograph with description: 'Calfskin shoes give good general service for city street wear.' With another photograph underneath reading: 'Sheepskin (kid) in bargain shoes has stretch, loses shape quickly, scuffs easily.'

"A more damaging reference and insinuation could hardly be conceived than to imply that kid was bargain shoes, particularly when there were no pictures truly showing shoes made of what is properly known as kid.

"Page 5 (fourth paragraph, first column). The paragraph stating that most suede footwear is made of calf, ignoring completely the fact that millions of feet of kid suede is sold each season to shoe manufacturers, with perfect satisfaction and wear to the consumers.

"(Last paragraph, second column.) The statement that genuine kid leather is not used for shoes is absolutely incorrect, as millions of kidskins are used by the various tanners.

"The subsequent sentences are delusive and, on the whole, the article has the earmarks of propaganda for calfskin and other leather competitive to kid.

"It hardly seems proper that a Government agency should be used as a vehicle to disseminate misinformation which is damaging to an important industry.

"We do not believe that any agency of the Department of Agriculture intentionally was a party knowingly to this harmful propaganda. We are disposed to think that the article was the result of lack of proper information rather than competitive inspiration.

"Nevertheless, we feel that steps should be taken to correct any harm that may have been done by the appearance of this erroneous information."

To this we have replied:

"First," our letter reads, "I want to thank you for your very frank challenge of this piece, and to assure you that we have every desire, in giving useful buying information to consumers, to be fair and impartial in our treatment of the products of competing industries.

"Your suggestion that the article in question 'has the earmarks of propaganda for calfskin and other leather competitive to kid' has greatly surprised us, because nothing could have been farther from our intention. Indeed, if you will reexamine the text you will notice that in our reference to calfskin shoes we simply stated: 'Its flexibility makes it a desirable choice for general service;' while in our reference to kidskin shoes we said: 'Kid shoes, often the first choice for street wear and for dancing. . . . These skins finish well in many different colors, are soft, pliable, and porous—characteristics prized in a summer shoe.'

"May I take up each point that you raise in your leter? First you draw attention to the caption appearing under one of the photographs but do not reproduce that caption exactly as it appeared in print. As printed, it reads: 'Sheepskin ("kid") in bargain shoes is stretchy, loses shape quickly, scuffs easily.' The use of the quotes and the parentheses was for the very purpose of emphasizing the fact that sheepskin and kid are not synonymous, although some sheepskin shoes may be sold as kid. It is difficult for me to understand how anyone could infer from this caption that we were saying that 'kid was bargain shoes.' On the contrary, the text states very clearly that 'Best grades of kid leather are expensive.' On the basis of good authority, we went on to point out that sometimes consumers are offered bargain 'kid' shoes which are not 'kid' but sheepskin. Certainly there is nothing derogatory to kid in such a statement.

"Our omission of a picture of kid

[Concluded on page 18]

ON GUARD FOR CONSUMERS

Olives from Spain, like all foods imported from other countries, must measure up to the regulations of our food and drug laws. Fifteen percent of the time of the food and drug force last year was occupied in the control of import traffic.

Headline news from the 1937 report of the chief of the Food and Drug Administration

"On April 13, 1937, the United States attorney for the District of Massachusetts, acting upon a report by the Secretary of Agriculture, filed in the district court a libel praying seizure and condemnation of 44 cartons of raisins at Pittsfield, Mass., alleging that they had been shipped in interstate commerce on or about March 20, 1937.

"On May 10, 1937, no claimant having appeared, a decree of forfeiture was entered and it was ordered that the product be destroyed."

Behind this technical language of the court is the story of the Food and Drug Administration at work.

In an eastern city, someone became ill from eating raisins. The case was reported. Food and Drug men got on the job. They analyzed raisins taken from the same box as those which had caused the illness, and also raisins from an unopened box bearing the same identification marks and purchased at the same time. The fruit in each box had an alarmingly high hydrocyanic acid content.

Job number one was to find out where these raisins came from; second, to what places they had been shipped in the country; third, to remove all products which contained the poisonous toxic acid from the market; and fourth, if possible, to remove all possibilities of this type of "accident" happening again.

Food and Drug men traced the fruit from the eastern source across country to the port of San Francisco, and discovered that these particular boxes of raisins were a part of a large shipment of dried fruit that had been tied up on the docks during a maritime strike. When released, as a precaution against insect infestation, the entire shipment had been treated with hydrocyanic acid, and had remained in contact with it for varying periods. As a health measure, hydrocyanic acid is often used as a fumigant on incoming vessels. It is also effective in destroying insect infestation. Federal agents tracked down all shipments of this fumigated fruit, examined some 850 samples of it, and seized approximately 280,000 pounds of raisins.

Then came the follow-up work. Officials visited individual packing houses and drying yards to investigate their fumigating practices. Fifteen out of one hundred and four concerns admitted using hydrocyanic acid on fruit which was held in storage before shipping. The Food and Drug Administration has always maintained that "the use of a highly toxic fumigant on foods is always hazardous because of the possibility of human carelessness and the many unexplored possibilities of retention of the gas by the food under some conditions." As the result of the investigation, the use of hydrocyanic acid as a fumigant has been discontinued by the dry-fruit packing industry.

This raisin story is only one of the high spots of the work which engaged the Food and Drug Administration in the past year. We have space here for only a brief survey of a few of their activities. For a more comprehensive review, read the "Report of the Chief of the Food and Drug Administration, 1937." (Superintendent of Documents, Washington, D. C. Price, 5 cents.)

Last year when the dreaded word "FLOOD!" flashed over the wires and the radio, the Food and Drug immediately organized to meet the emergency situation. Angry torrents, carrying away homes and possessions, leave in their wake desolation, ruined crops, and possible epidemics due to contaminated food. During the disastrous Ohio Valley floods, the Food and Drug Administration assigned 44 men to the distressed districts. Eighty men from State and city food-inspection organizations and from other Federal agencies made up the emergency force to see that food which had been damaged by flood waters did not reach consumers. Thousands of pounds of perishable commodities were ordered destroyed. Other products, including some grains, were allowed to be denatured and sold for animal feed. Canned food hermetically sealed had to be reconditioned before it could be sold. It is estimated that this emergency staff handled enough food and drugs to maintain a city of 200,000 population for a year.

Old utensils are giving way to new in the maple sirup industry. Following discovery last year of lead in maple products, Food and Drug officials warned maple producers of the dangers of using buckets and other equipment painted with lead paint.

Not as dramatic as the work during the flood, but fully as important for the welfare of the Nation, is the everyday routine inspection of food and drugs which are shipped in interstate trade or are imported from other countries. The major effort in the past year, as in the preceding years, was directed toward the control of food and drug adulterations which have a direct effect on public health. Thousands of samples of food and drugs were examined—many seizures were made. However, there was a slight decrease in the total number of criminal prosecutions as well as seizures.

Food contaminated with lead, arsenic, or fluorine has long been the concern of the Food and Drug Administration. Examination of fruits and vegetables for excessive spray residue is one of its regular activities. Every year, the Administration has found it necessary to seize thousands of pounds of these products. However, due to the campaign waged against these menaces to public health, both by the Federal Government and State agencies, the spray-residue situation has materially improved. There were fewer seizures of fruits and vegetables because of lead, arsenic, and fluorine contamination this year than last year. That's cheering news but there is still need for constant vigilance. There is always the danger that through carelessness, ignorance, or unscrupulousness on the part of an isolated producer unwholesome food will reach consumers. The report points out that though celery, cabbage, peppers, and cauliflower, which have formerly given considerable concern because of spray residue, were in general free from objection; however, one shipment of cabbage which was seized in Washington, D. C., contained a per-

This cat is patiently waiting to see if a commercial flea cure will rid him of fleas. Insect sprays are tested by the Food and Drug Administration to see if they do the work their labels claim they will do.

centage of arsenic high enough to be a menace to health. Investigation showed that the cabbage had been dusted with arsenic only 9 days before shipment. The product was traced to the farm from which it came. Cabbage in the field was examined. Analysis showed that there was 100 times more arsenic per pound than the accepted tolerance. State authorities took control of the remainder of the crop in the field and criminal prosecution has been instituted against the shipper under the Federal act.

Practical-minded people will agree that "an ounce of prevention is worth a pound of cure." The Food and Drug Administration works on this theory, too. Take the case of the maple sirup industry. When buckets and storage tanks and evaporating pans used by the industry are painted with lead paint or soldered or mended with lead, chances are that some of the lead will be in the finished product.

Last year, long before the maple trees were tapped for their sap, the Food and Drug Administration, in cooperation with various State agencies in the maple-producing territory, carried on an intensive educational campaign warning producers of the dangers of using lead utensils and giving them constructive suggestions on how to prevent lead contamination. The campaign was followed by field work in the height of the season. Equipment and methods of processes were checked. As a consequence, there was material improvement in the industry. Improvement meant safety for consumers and no danger of loss to the producers who cooperated with the lead campaign.

For those who refused to cooperate there was the hazard of seizure of their product. One man who bought sirup from small producers, evidently pooh-poohed the educational campaign and waged a counter one of his own, advertising for the benefit of the small operators of maple farms: "We pay no attention to lead ingredients, so you can use the same tools as ever." As an aftermath of this announcement, 22,987 pounds of high-lead maple sirup shipped by this agent were seized by the Food and Drug men.

The Federal Government brought 1,700 cases bearing on adulteration and misbranding of food and drugs to court this year. Of these, 1,355 dealt with foods, 345 with drugs. "Fines varied from sums as low as $1, $2, and $5 to a maximum actually paid of $1,500. Much higher fines were imposed in several cases but were remitted in large part by the courts. Three jail sentences imposed in connection with second offenses were also suspended and the defendants placed on probation."

Commenting on the court cases, Mr. Campbell, chief of the Food and Drug Administration, says: "Courts in general vouchsafed no explanation for the imposition of nominal penalties. In one instance of a $2 penalty for the shipment of filthy and decomposed walnuts, the court indicated that it had taken into consideration the fact that the defendant had suffered a $1,400 loss in the seizure and destruction of the shipment by the Government. In another instance, dealing with a practically worthless product offered as a treatment for serious diseases of the eye, the court imposed, without comment, a fine of $1 and costs of $35.

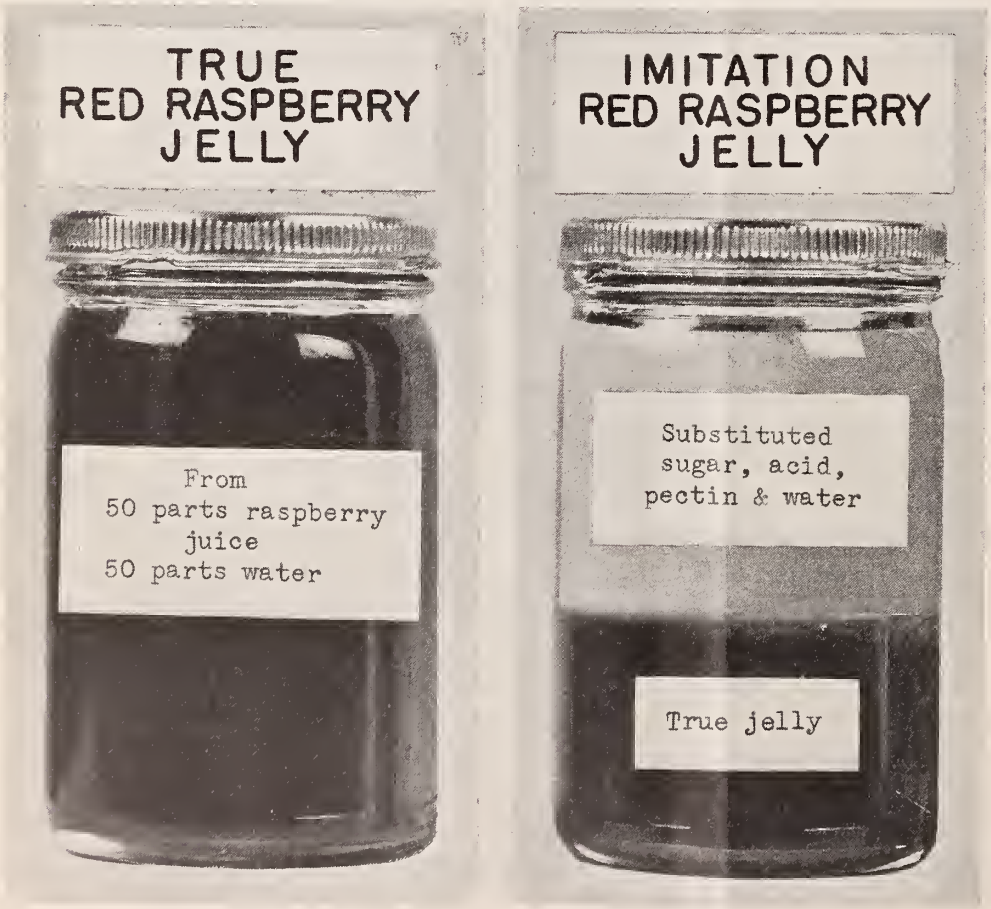
"Other courts," Mr. Campbell continues, "have indicated a growing interest in the public protection afforded by the Food and Drugs Act. In passing sentence against a spinach canner who had entered a plea of guilty to the sale of dirty canned spinach, a court remarked that if the defendant was unable to manufacture clean food he had better get out of business and stay out of that court."

Consumers will undoubtedly agree

with that decision. Dirty food and decomposed food have no place on the market. Some of the products which were seized for this type of adulteration were tomato products, frozen eggs, canned tuna fish and salmon, and cream for butter making. In the past year, the Administration and the salmon-packing industry have worked out a new method for simplifying the control of the pack and making it more effective. Due to the cream improvement campaign inaugurated in 1935, less cream was seized last year than in 1935, and the condition of the condemned cream was not as bad as it had been in preceding years.

"Nothing can be said in defense of a manufacturer who sells water to consumers at food prices," says the report. Yet in a courtroom, the Food and Drug Administration has difficulty in proving this type of economic cheat. Water is a natural ingredient of practically all foods, but just how much water is it necessary to add to food in processing it? To date, butter is the only food for which a legal standard has been established. All butter sold in interstate trade must be 80 percent butterfat. If the fat content is deficient, chances are that the water content is high. Because of the accepted standard, it is quite easy to ascertain whether butter is adulterated with water or not. Not so with many other products, such as jams, preserves, orange beverages, frozen eggs, tomato juice, and fresh oyster shipments, all of which were seized last year for this offense. "There is a crying need," says the official report, "for legislative authority to set legal standards for foods under which, among other requirements, definite limits for water content can be established."

To see that you get your money's worth of fruit when you buy jams and jellies is one of the jobs of the Food and Drug Administration. During the year many seizures of jellies and jams were made because of the substitution of water for food or the use of too much sugar and too little fruit per glass of jelly.



An unusual economic cheat was detected in the import of thyme and marjoram. One large foreign shipper was found to have been extracting volatile oil from these spices, then mixing 20 to 50 percent of the exhausted leaves with good leaves for shipment to this country. About 70,000 pounds of this substandard material were seized. Another manufacturer was buying coffee chaff, a waste product, and was molding it into granules resembling coffee beans which he sold to dealers to be mixed with real coffee.

Policing food and drug labels, too, is part of the work of the Food and Drug Administration. Under the present law, any statement on the container of a food or drug product must be a truthful statement. In the past year, 161 seizures of medicines for human use, representing the products of 124 shippers, were made because of false and fraudulent therapeutic claims on the labels. Nearly 900,000 gallons of imported oil, principally cod-liver oil, intended for animal feeding, were tested for their Vitamin D values. About one-third was below the Vitamin D requirement or contained less than was stated on the label. In interstate tests of certain vitamin products, 24 out of 34 samples failed to show the vitamin values claimed for them. However, the large proportion of samples found illegal does not reflect accurately the validity of vitamin claims for products on the market. Limited facilities dictated a policy of confining vitamin tests largely to those products most likely to undergo deterioration during manufacture or storage.

WHEN YOU BUY COAL

Tips to consumers who want to make their coal dollars count in maximum fuel values

It's in the spring—not winter—when the wise consumer seriously ponders the problems of coal buying. Then prices are usually at their lowest. The cold weather that bears down on the thermometer bears up on prices—sometimes lifting them a dollar above their April levels.

But bargains come to those not only prudent but lucky enough to be able to buy when low-price seasons roll around. For those who were neither last spring, a present guide to buying coal has its immediate uses. For the rest, we anticipate next April's problems.

Those dusty lumps of coal which you feed to your furnace and your stove have a pedigree which extends millions of years beyond the first recordings of time. They are the product of the slow decay of plants which flourished in a world that even today is a mystery to scientists. In prehistoric eras there were dank swamps, overgrown with plant life, where today coal mines are burrowed deep into the earth. That plant life decayed, was gradually covered with sediment, and then, by a process that took thousands of centuries, was transformed into the material that is a basic fuel for furnaces in home and industry today. Geologically minded consumers interested in this romance of the formation of coal should go to a natural history museum and there see lumps of coal which have retained through the ages the lacy imprints of prehistoric ferns, shrubs, and other plants which formed them.

Decayed vegetable matter in the process of forming coal first becomes peat, then lignite, then bituminous coal, and finally anthracite. Throughout the United States there is coal in each of various stages of development: Peat beds in Wisconsin and Michigan; lignite fields in North Dakota and Texas; the subbituminous coal beds west of the Mississippi River; bituminous coal fields in Pennsylvania, West Virginia, Ohio, Illinois, and other States; and the anthracite beds in Pennsylvania.

Coal began to be used generally for heating purposes in the latter part of the eighteenth century. Today coal is consumed at a rate which is many millions of times faster than the rate at which coal is being manufactured by nature. Some day we may have to face the problem of the exhaustion of coal resources. Today, however, there is in America alone sufficient coal for our needs for hundreds of years to come.

Chemists tell us that coal is composed of carbon, hydrogen, and various earthy materials, but after years of study we still do not exactly know how these constituents combine to form coal. When coal is heated the hydrogen and part of the carbon are driven off in the form of gases. This part of the coal is called the *volatile matter*. The part of the carbon that remains in a solid state is called *fixed carbon*.

After coal is completely burned, the earthy material in it remains. This is the mud that was deposited with the vegetable matter in the swamps where the coal was formed. Annoyed coal consumers call this mud the *ash*.

Consumers who fire their own furnaces know that when they shovel coal into their fires, dense smoke appears which seems to be stifling the fire. Fire then licks up between the coals and the smoke is illuminated by a bright orange flame. This smoke is unburned volatile matter from the coal. Unless the volatile matter is consumed by the flames it goes up the chimney in smoke, wasting the consumer's fuel dollar, poisoning the atmosphere of the city where he lives, and smudging the buildings in his city to a dirty, dismal gray. Ordinarily the more volatile matter coal contains the more it will give off this heavy smoke.

Heating plants may be designed to burn the volatile matter as fast as the coal gives it off, but in most cases this is not achieved even in plants where smoke-consuming devices are installed, and where the firing is done by a professional furnace tender. In the home it is more difficult to burn a high-volatile coal, that is coal containing a large percent of volatile matter, without smoke. Since the higher-volatile coals are the cheapest coals, it is worth learning how to use the cheapest coal which household furnaces can handle. Inventive genius has made real progress in using these cheap coals by developing automatic stokers for the house-heating furnace. The machines feed the coal gradually to the fuel bed so as to consume all the smoke before it can escape from the furnace.

Fixed carbon is the source of most of the heat in coal, consequently its most important ingredient. It does not smoke when it is burned. Coke and anthracite have most of their combustible matter in the form of fixed carbon. For this reason they are sometimes called "smokeless fuels."

Another constituent of coal, the ash, is a total loss to the consumer. It does not burn, it gives no heat, and, most annoying of all, it must be disposed of at considerable labor or expense. The ash also has another quality which makes it objectionable. It melts. When ash melts at a low temperature, as some ashes do, it forms a slaglike mass in the bottom of the fire pot which is known as *clinker*. The higher the melting or fusion temperature of the ash the less likely it is to form clinkers. Proper firing of the furnace, too, may reduce the tendency of ashes to form into clinkers.

Water is the other major constituent of coal. Relatively undeveloped forms of coal such as peat, lignite, and such bituminous coal contain more water than Eastern bituminous coal and anthracite. Water in coal reduces its worth, since the water doesn't burn and must be vaporized

Transportation costs are an important item in the price consumers pay for coal. Most of the coal consumed in cities is hauled from the mine by freight cars. Here anthracite buckwheat has been dumped into storage bins. From the bin the coal is being transferred to a truck by an automatic loader before rumbling on its way to the ultimate consumer.

before the coal will burn. Not all water found in coal is a natural part of the coal. Coal stored by dealers outdoors may absorb moisture. Sometimes unscrupulous coal dealers have been known to short weight consumers by watering coal before weighting it. Watering coal *after* weighting reduces dust and is a help to the household consumer.

Heat, of course, is what consumers really want when they buy fuel. Consequently the most important quality of fuel is its ability to give off heat. Engineers determine the amount of heat which fuel gives off by burning the fuel completely under perfect conditions and by measuring the amount of heat given off. The British thermal unit, Btu for short, is defined as the amount of heat necessary to raise the temperature of 1 pound of water 1 degree Fahrenheit.

Number of British thermal units in a particular kind of coal is not an absolute measure of its value to the consumer, however, because the British thermal unit content is determined under perfect conditions. Under the imperfect conditions that exist in the home, the heat that is actually derived from the fuel is considerably less than the potential heat contained in the fuel.

Engineers have a way of measuring the actual heating value of a coal against its British thermal unit content. They call this comparison the "utilization efficiency" of the coal. If a particular fuel has a British thermal unit content of 100 and if only 75 of these British thermal units are actually obtained from the fuel when it is burned in the furnace, the ratio is 75 to 100 or 75 percent. This 75 percent is the "utilization efficiency" of the fuel. This efficiency varies considerably with the heating plant, the fuel, and the fireman.

Here's how the "dollar efficiency" of a particular fuel is determined: Suppose a certain fuel costing $10 a ton contains 20 million British thermal units. The cost of each million British thermal units is $0.50. If in actual practice the purchaser of this coal is able to get only 10 million British thermal units for every 20 million in the ton—its "utilization efficiency," that is, is only 50 percent—then the cost per delivered million British thermal units becomes $1.

Price per ton of coal, then, is not the cost of heat. When a household consumer buys coal, the dealer should be able to say how many British thermal units it contains; and to figure very accurate heating costs, the consumer needs to know the efficiency with which the coal is being burned and the heat transmitted to the house.

Byproducts of many agencies of Government in Washington are services that help consumers in their buying problems. Only one agency has been created by Congress with the name "consumer" in its title and with the single duty to represent consumer interests before officials charged with the control of prices of a consumer product. This is the office of Consumers' Counsel of the National Bituminous Coal Commission. In our next issue we will sketch the work of this unique Government office.

Large companies purchase coal by specification; heating engineers write the specifications and chemists analyze the delivered coal to see if it conforms to them. But this is an expensive procedure, so costly that the Federal Government uses it only for purchases of coal in lots of more than 300 tons.

Consumers buying coal will find the use of specifications and chemical analyses too expensive unless they are members of cooperatives like one in Cleveland which guarantees the quality of the coal it sells to its cooperators. Other consumers must ask their dealers to certify to the qualities of the coal they sell and depend upon their reliability for accurate descriptions.

Anthracite, or hard coal, rates high as a clean source of heat. It is free-burning; that is, the pieces of coal do not swell, soften, or cake together when it is burned. It is delivered to consumers screened and graded according to size, and it has very little coal dust. It burns with a blue flame without smoke. Anthracite has a high fixed carbon content—usually more than 92 percent—and a low percentage of volatile matter. It burns more evenly for longer periods than other coals and consequently requires less attention from the householder. Against these advantages, anthracite usually comes at a higher price per ton than other coals.

One pound of anthracite contains 12,500 British thermal units. The average pound of anthracite in the average home furnace can be burned at an "efficiency" of 60 percent. At a cost of $13.50 per ton, the anthracite user pays 90 cents for each million delivered British thermal units. This cost, of course, is only a general guide to consumers, for various types of anthracite coal will contain more or less heat units than this and will cost more or less than $13.50 per ton, depending upon the consumers' nearness to the anthracite fields.

Anthracite is usually sold in seven sizes. From big to little they are: Egg, stove, chestnut, pea, buckwheat, rice, and barley. As the size of anthracite diminishes, the ash content increases, and the British thermal unit content decreases. However, price also decreases with size. Consumers must determine for themselves the real heat cost of the different sizes.

Semi-anthracite coal is not quite as hard as anthracite. It, too, is delivered screened, but it contains more dust than anthracite. Its fixed carbon content is usually from 86 to 92 percent. Since it has more volatile matter in it, it burns first with a yellow flame, which afterward changes to blue. Semi-anthracite burns more readily and more rapidly than anthracite. Bituminous coal is a soft coal containing a high percentage of volatile matter. For this reason it burns with considerable smoke and a yellow flame. Ash content of soft coals varies from very low to very high, depending upon the particular region from which the coal comes.

Three general types of bituminous coal are included in this group: low- and medium-volatile bituminous; high-volatile bituminous; and sub-bituminous. Low-volatile bituminous is the highest in fixed carbon content and the lowest in volatile-matter content. It does not smoke very much and is usually sold as a semi-smokeless fuel. The fixed carbon content of bituminous coals varies from about 45 percent for the sub-bituminous varities to more than 78 percent and less than 86 percent for the low-volatile bituminous varities. These figures are on a dry-mineral-matter-free basis. The British thermal unit content varies from 9,000 to 15,000.

Pocahontas coal is one variety of low-volatile bituminous coal. The best of this coal, at a cost of, say, $9 a ton, has a British thermal unit content of 14,800; it can be burned with an efficiency of about 55 percent or more. This delivered cost for each million British thermal units is about 55 cents.

High-volatile bituminous coal at $7 a ton, with a British thermal unit content of 13,200 and a combustion efficiency of 52 percent, costs 51 cents per delivered million British thermal units. This coal is sold under various names: High Volatile Fairmount, Dorothy Splint, High Volatile Kentucky, Hocking Valley No. 6, Cambridge No. 7, Eastern No. 8.

Each size of coal has a specific advantage for various types of stoves and furnaces. Top row (l. to r.), anthracite: Buckwheat, pea, nut, stove, and egg. Below, bituminous: Briquets, stove, and egg; coke: Nut and egg.

A great variety of bituminous coals are on the market with many differences in British thermal unit content, ash content, and fixed carbon content. Consumers may obtain more exact descriptions of the particular coal they buy by writing to the United States Bureau of Mines for the analysis of coals by States.

Bituminous coal users often complain of expensive dust. To avoid this dust, the coal may be watered or oil-treated before it is brought into the house. It is a good idea, to, to purchase bituminous coal in as large quantities as is possible, for the less frequently the coal is delivered into the home the less dust will result.

Bituminous coal comes in these sizes: lump, egg, stove, nut, pea, stoker, and slack. Egg and stove types are used most often by domestic consumers, while the stoker size is recommended for use with "automatic fireman."

Coke is coal which has been heated in huge ovens until all the volatile matter has been driven off. The gases when driven off are burned for fuel in steel furnaces and other manufacturing plants. Many valuable coal-tar products, such as saccharin (which is sometimes substituted for sugar), dyes, and medicines are manufactured from the liquid byproducts of coal carbonization.

Coal heated in this manner is transformed into dull black, porous lumps. These lumps, the coke, are high in fixed carbon content and contain practically no volatile matter. Because the volatile matter is almostly completely driven off, coke burns with no smoke. The coking treatment does not effect the ash content of the coal. Coke therefore contains a high percent of ash which reduces slightly its value as fuel.

Loss of the volatile matter makes coke a fuel which burns less readily than coal. Consumers who change from coal to coke often find that their furnaces have a tendency to go out easily. Careful firing, however, will overcome this difficulty. Other difficulties attached to the use of

Hot coals should be pushed to the back or to one side when feeding fresh fuel to the furnace. At the left, an amateur stoker carefully deposits the coal in the center pocket of the fuel bed. At the right he is cleaning out waste ash to insure free ventilation and draft for the burning coal.

coke are: its bulkiness, which necessitates larger furnaces and greater storing space; and its large ash content which results in the formation of clinkers. Against these disadvantages there may be set its relative smokelessness and its greater heating efficiency. In cost, it scores low. At $8.50 per ton, for instance, a grade of coke containing 13,200 British thermal units burned with an efficiency of 60 percent, costs consumers only 55 cents per million delivered British thermal units.

Coke from coal comes in four standard sizes: lump, egg, nut, and pea. The egg size has been found preferable for the ordinary-sized stove and furnace.

So much for quality in coal.

Next important buying tip is to check on how much coal you get in a ton. There are two kinds of tons, the long and the short. One weighs 2,240 pounds, the other 2,000 pounds. Many cities prescribe which ton shall be used in the sale of coal. Consumers are probably best served when the unit prescribed by law is the 2,000-pound or short ton. Whatever the local law in the case may be, it's a wise consumer who knows it and keeps an eye on its observance.

In Washington, D. C., the law requires that coal be sold by the long ton. In 1933 some coal companies met and agreed among themselves to reduce the price of coal per ton, but to change from the long to the short ton. The cut in price was not great enough to counterbalance the cut in weight. In fact, coal dealers, by this device, were able to make a profit of half a million dollars in 1 year. The superintendent of weights and measures in Washington then stepped into the picture. As a result, consumers of coal in Washington today get a full 2,240 pounds required by law when they buy a ton of coal.

Protection for the consumer who wants to be sure that he is getting every pound that he pays for, and for the honest dealer who gives full measure, must come from local weights and measures laws and enforcement. In some cities officials are authorized periodically to check dealers to see that they deliver a full ton to consumer coal bins. The National Conference of Weights and Measures Officials has drawn up a model law as a standard for local and State legislation. Under this model law, coal dealers would fill out duplicate weighbills, showing how many tons of 2,000 pounds are in the sale; one weighbill goes to the consumer, the other is held by the dealer so that at any time a

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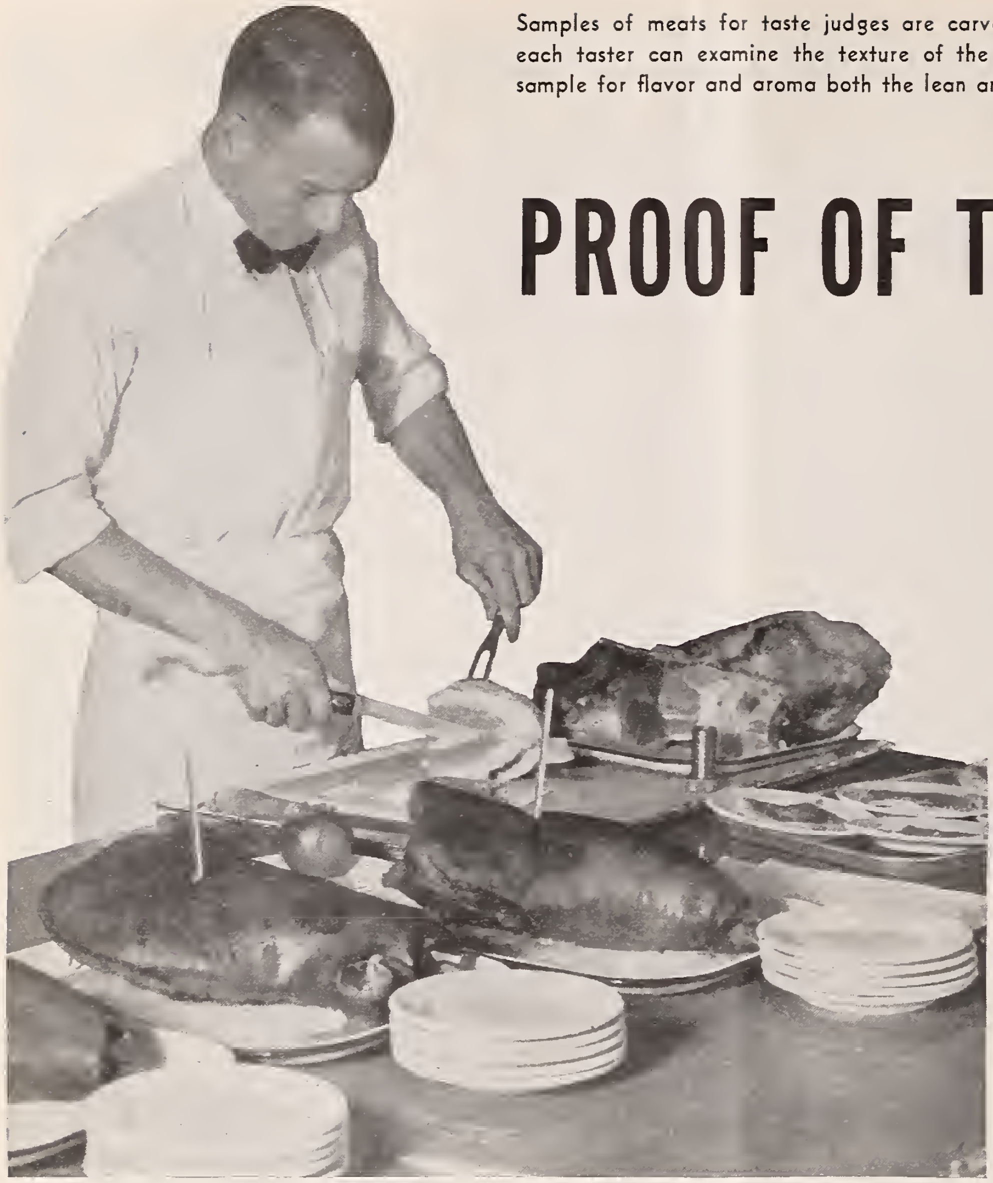

Samples of meats for taste judges are carved so that each taster can examine the texture of the meat and sample for flavor and aroma both the lean and the fat.

PROOF OF THE PUDDING

Science may measure to a fineness the nutrients in food; when it comes to appetite appeal, it's taste that counts. The Bureau of Home Economics tells here in word and picture how it makes taste tests.

FINAL test of food quality, to most people, is: How does it taste? Meat, cake, bread, jelly, potatoes—all food that's eaten must undergo this examination. And every cook knows that this taste test is a critical one where it's performance that counts.

In addition to being a good source of this vitamin, or that mineral, or being especially valuable for some other reason, a satisfactory food must have good eating quality. It should have a pleasing aroma and a desirable flavor. These characteristics can be judged only by human beings.

Part of every experiment on food quality carried out by the Bureau of Home Economics is for this reason a taste test. Competent judges actually taste the food and record their opinions concerning it on standard score cards.

These judges are ordinary people—secretaries, executives, laboratory workers—of the Department, both men and women. Taste-testing is only a sideline to them. They do their regular work each day and are called in on occasion to sit in judgment on foods. But they are discriminating, chosen for their ability to show consistently good taste judgment.

A good judge must have enough experience to recognize different qualities of foods when he tastes them. He should have an analytical mind so that he can translate his opinions into the words of the standardized score sheet. His taste standards must be high. He should be able to duplicate himself—that is, be consistent in his choices from day to day.

Personnel of a taste jury varies with the aim of the experiment. If the aim is to find the better of two methods of making jelly, then judges are persons acquainted with standards of jelly excellence. But the aim may be to determine preferences of consumers for certain types of food where there is no recognized standard of excellence. Then a representative group of consumers with no specialized food knowledge can be used.

Technique of preparing food to be taste-tested varies somewhat. But in all cases the judge does not know the differences in the samples. If the food is ordinarily served hot, or if it must be cooked to develop aroma and taste, the samples are judged while they are hot. And the judging takes place at a time when the tasters are neither too hungry, nor when they have just finished a meal.

Typical taste-testers are the meat judges. For the past 11 years the Bureau of Home Economics has cooperated with Federal and State experiment stations to find how production factors affect the eating quality of lamb, pork, and beef. That is, they want to find how breed, feed, age, sex, and method of handling these animals affect the flavor, the tenderness, and the general palatability of their meat. And when they find what kinds of meat have the highest eating quality they can trace backwards through their experimental data to find just how they produced the hog that gave the pork that the judges rated best.

To determine the palatability of the meat is the final chapter in each of these experiments. A standard cut from each animal is cooked. Pork loin, ham, beef rib roast, leg of lamb are four of the standard experimental cuts. These come from corresponding sides of each animal. Throughout an experiment these cuts are cooked to the same stage of doneness. The cook determines this exactly by a thermometer placed in the meat.

Usually meat judging takes place about 3 o'clock in the afternoon. The trained judges meet around a table. Ordinarily there are from three to five of them. In front of each judge is a glass of water, a plate, a fork and paring knife, and a tart apple. As each slice of unseasoned meat is put before him, he taste-tests it and records his opinions on a standard score card.

Let's look in on a session of the pork taste-testers. This time there are four judges assembled. In comes a girl with the first samples—four small pieces of pork from the first roast. She sets a plate in front of each judge. The judge lifts the piece so that he can smell the aroma while the pork is hot. He records his opinion. And he judges both how strong the flavor is and whether or not he likes it.

Next he notes the texture—how fine the grain is. Then he eats a bit of the fat. He tastes this for intensity and desirability. He does the same for the lean. He records his opinion of the tenderness of the meat. He notes how much juice there is and how rich that juice tastes to him. Then he marks the color of the lean and of the fat.

Carefully he looks over the score card and signs his name. All is done for one sample. The judge takes a sip of water and eats a slice of tart apple. The taste of the last sample is gone and he's ready for sample No. 2.

Meanwhile, out in the kitchen the roasts are emerging from the oven at intervals of about 10 minutes. This allows time for the judges to taste each one and for carving and doing the statistical work that needs to be done in the kitchen.

Since the opinions of all the judges are recorded on standard score sheets, it is possible to compare and correlate the results. Then these results may be sent back to the producer. Thus he finds what the consumer will probably like. Since he knows the whole history of the production of the animal, he can duplicate it for meats that should sell well on the market.

In the bread flavor tests being carried on now, the 14 selected judges never have more than three samples to taste at once. At 11 o'clock, several mornings a week, each judge gets a paper sack. In this sack are the three samples. He smells them, tastes them, and records his preferences on a score card. The samples are varied in many significant ways. One day the breads are mixed by three different methods. The next variable may be the class of wheat used in each. Each different factor is judged at least twice. When the

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Each cut of meat used for taste tests is cooked in exactly the same way and to the same stage of doneness. A thermometer in each roast tells when that stage is reached.

The case history of each cut is known by scientists conducting the experiment. Their purpose is to find out how certain production factors affect eating quality of the meat.

There's little time for conviviality for a tasting jury. Each judge is kept busy tasting and smelling and writing his opinions down on his standardized score card.

It's good fun to eat apples, but small boys should be cautioned about unripe ones. Green fruit is not poisonous but it is digested more slowly than ripe fruit.

DEATH TO FOOD FALLACIES

Some can be costly in money; others costly in health. Here are a few false, foolish, or half-true ideas about nutrition to unload from your pack of prejudices

When the president of a State teachers college only a few years back asked the parents and teachers of elementary school pupils in 14 States if they believed that eating fish improved the brain, 59 out of each 100 in the general population and 32 out of each 100 teachers answered "yes."

This is the age of science, we like to think, until suddenly we come across such evidences that superstition crushed to earth seems to rise again.

Lots of us are credulous when it comes to what we eat or don't eat. We worry a good deal about being sick, and think maybe some miracle of diet can cure all our real or fancied ailments. The science of nutrition, while advanced, is still fairly new. Its great strides have been in the last two generations. The facts it has unfolded lend an air of credibility to extravagant claims made for some diet plans or food or "nutritive" preparations, in what sounds like the language of science.

Sometimes a little basis of fact is enough to give plausibility and popularity to a myth. For example, science has established that there is phosphorus in the brain and phosphorus in fish. From that it is an easy, though illogical, transition to "fish is brain food."

Belief in this sort of logic may throw a family's diet way off. At best, it may waste money; at worst, it can cause people to go without necessary elements in the diet, the lack of which may keep a person below "par" or result in actual illness.

So it is worth taking a few of the food legends still in the air and bringing them to earth. Without further ado, then, let us consider some typical bits of what a great biologist has called "pseudodietetic inspiration":

"It Is Dangerous to Eat Milk and Fish at the Same Meal"

As long as the foods themselves—the milk or ice cream, the fish or oysters—are fresh and in good condition, you run no risk in combining them at the same meal. Fish chowders and oyster stews *with milk* are among New England's proudest gifts to the American culinary heritage. Fish baked in milk is the basis of some excellent recipes, too.

Any foods which may safely be eaten separately may safely be eaten together, flatly declares one of the greatest nutrition authorities.

"Use of Aluminum Pans Will Give You Cancer"

Hundreds of hospital kitchens are equipped with aluminum vessels. If aluminum in foods were poisonous and a cause of cancer, most of us would be in a bad way. An aluminum-free diet is almost impossible to prepare. The earth's crust contains about 8 percent aluminum. Anyway, experiment has shown that the body rids itself of 99.9 percent of the aluminum it takes in with its

food. Traces of aluminum do not harm the body. Tomatoes may brighten or spinach darken your aluminum pans, but you don't need to worry about its doing anything damaging to your health.

"Don't Drink Water With Your Meals"

If you like water with your meals, drink it. In reasonable amounts it stimulates the digestive juices and facilitates digestion. Fear of water has been based on the apparently logical argument that "water dilutes the enzymes" which must be present for digestion. But the enzymes are present in the same quantity, regardless of dilution by a reasonable amount of water.

Drinking a lot of water just before meals is not so good. Filling the stomach with water leaves little room or appetite for the meal to come.

Some people fear iced water. To the normally functioning stomach it presents no threat. Twenty minutes after drinking iced water the stomach's temperature is again the same as that of the rest of the body. This is the same time it takes to return to body temperature after drinking a cup of hot coffee or other beverage.

"For Heavy Physical Work, You Require Lots of Meat"

Energy for physical labor can come from almost any food. The most economical sources of energy are foods rich in carbohydrates (sugars and starches), such as bread, cereals, sugars, certain vegetables, and fruits. They form the largest part of our diet, ordinarily. Fats furnish a good deal of energy, too. Meat gives us chiefly proteins. Proteins are essential for rebuilding tissues of the body as daily wear and tear destroy them. We cannot get along without proteins, but they are an expensive source of energy.

To use protein for energy, the body has to break part of it down into carbohydrate, depriving it of its nitrogen content, and burn it in the form of carbohydrate. One of America's nutrition experts compares that process to making a fire with boards full of nails. "The board would burn like any others, but the nails would add nothing to the fire."

Studying the college crew in action, two Yale scientists concluded that an athlete depends greatly on carbohydrates for body fuel when under special pressure. A good carbohydrate intake seems to better his wind and increase his endurance. "Sugar is the best quick fuel for intense exertion," they report.

For the long-time pull, of course, athletes—like the rest of us—require a well-balanced diet.

Two generations ago scientists gave up the theory that muscle work demanded an extra supply of proteins—and hence of meats. Like many another exploded idea in the realm of food, the old theory lingers on.

"Children Need More Heat-Producing Foods for Cold Days"

"Heat-producing" or "energy" foods are usually about the last thing a mother need worry about in planning the family menu, even for winter days. The average child who does not go hungry gets enough of the starches, sugars, and fats to keep him in calories and warmth. Nowadays, too, schools and homes are better and more evenly heated than ever before.

Every recent study of the Nation's diet shows that we are best off as to energy foods, worst off as to protective foods. "So, if you are interested in providing meals for the family's best health, concentrate on the protective foods first," say the Bureau of Home Economics experts.

"In other words, build a foundation of milk, eggs, green and yellow vegetables, tomatoes or citrus fruits, and so on, and then fill in with the starches, sugars, and fats"—that is, with foods high in these constituents.

Of course, it is expensive for low-income families to balance their diets with enough of the protective foods. But many foods, the home economists point out, fit into both classes. Certain foods you think of first as "starchy" or sweet—energy foods—may also contain some minerals and vitamins. Whole-grain cereals and potatoes, molasses and sorgo and cane sirups, are examples of such "many-value foods," which include some of the protective substances you need during cold weather and all the year round.

"Rich Foods Are Indigestible"

"Rich foods" we generally call those which are high in fat and sugar content. Digestibility—or indigestibility—is a question of the completeness of assimilation. From that standpoint, fats and sugars *are* very digestible. Bureau of Home Economics experiments showed that between 95 and 98 percent of fats (vegetable fats, butter, cream, lard, etc.) were digested.

Ease of digestibility—as distinguished from completeness of the process—is another matter. Fats remain longer in the digestive tract, slow up the process of digestion. Moreover, rich foods are usually compact, concentrated foods and take longer to digest for that reason. To the average healthy person this is not a matter of concern.

Difficulty comes with rich foods when (with a low proportion of other essentials) they add calories where calories are not needed. The important thing is not to get too much of the rich foods and to get the right quantities of other foods in the diet along with the sugars and fats.

"You Can Eat Vitamins Through Your Skin"

Vitamin D is the "antirachitic" vitamin. It helps the body to make effective use of phosphorus and calcium in the diet in building bones and teeth. Headliners in the small child's diet are the foods rich in this ricket-preventing vitamin. Because sunshine produces Vitamin D by acting on a substance called a "precursor of Vitamin D" (formerly thought to be ergosterol) in the human skin, a cardinal rule of baby care is plenty of direct sunlight. As an extra precaution against too little sunshine and diets not sufficiently rich in this essential vitamin, many doctors prescribe for babies up to 2 years additions to the diet of such things as cod-liver and other fish oils and concentrates of known potency. For older children, too, they sometimes recommend such diet additions during winter months when it is difficult to get direct exposure to sun.

How much of this vitamin is needed by grown-ups remains a question. Experts are inclined to think that the usual exposure to sunshine and a well-balanced diet (including adequate amounts of eggs, milk, butter, and certain fish such as salmon and sardines) will take care of the ordinary adult requirements for Vitamin D.

Even if adults could utilize effectively extra doses of Vitamin D, the experts look with the gravest suspicion on the skin route for its intake. "There is evidence," remarks the Journal of the American Medical Association, "that irradiated ergosterol may be absorbed through the skin of rats. This evidence has been an excuse for adding vitamins to various cosmetic preparations."

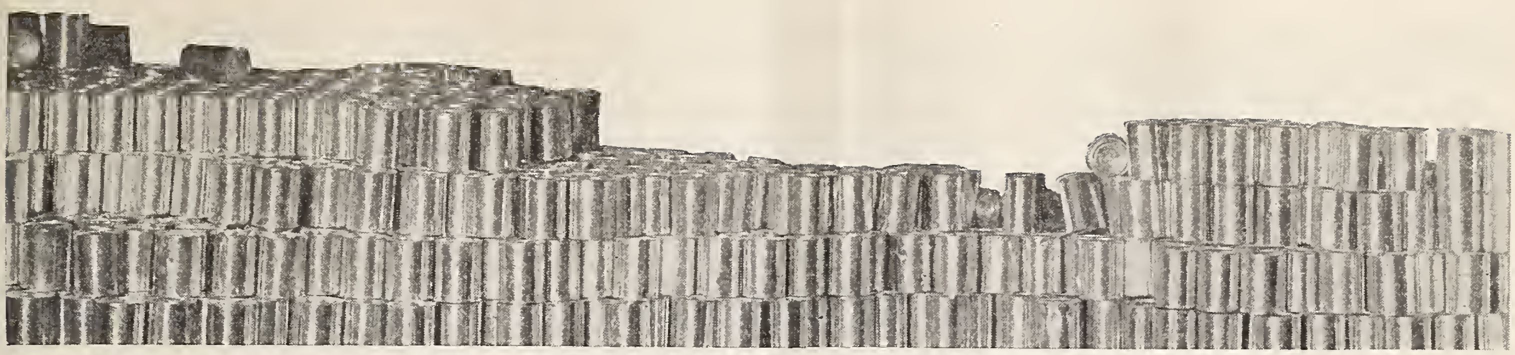
"The skin is an organ for excreting, rather than absorbing, substances," points out the chief of the Food and Drug Administration's Vitamin Division. "This is not to say that the condition of the skin cannot be helped by external applications of various kinds, but rather that actual nourishment reaches the skin through the circulatory system. The amounts of Vitamin D which could be rubbed or washed in through the skin to remedy a diagnosed deficiency would, according to available data, not be significant."

As to whether Vitamin D might be of benefit to the skin itself, the director of the Toilet Goods Association board of standards says: "The dermatologists I have consulted, men of prominence in their field, are unanimous in their statements that no satisfactorily controlled experiment work has been done which would show any value of Vitamin D to the skin."

At one time announcement was made of a "Vitamin F" held necessary for skin health. Such a designation has no standing among scientists. Science has apparently established that rats need certain unsaturated fatty acids, but the experts claim that there is no substantial evidence that human beings need these fatty acids. If they do, the scientists say, they can get all they need from a few cents' worth of salad oil.

Again, experts seem to hold that there is no need for application of Vitamin A to the skin; that if Vitamin A were to enter the body through the skin, it would probably have to be through skin lesions. "We know of no adequately controlled experimental work," states the director of the board of standards of the Toilet Goods Association, "which will show that these factors (Vitamin A and its precursor, carotene) can be absorbed through the skin intact or exercise their benefits by external application."

Foods—natural or prepared—rich in the needed vitamin, rather than external preparations, would again appear to be the efficient and economical way to remedy a deficiency condition. Fish-liver oils, milk, butter, eggs, cheese, and green vegetables are some of the foods that will give you Vitamin A.



MARKET NEWS FOR QUANTITY BUYERS OF *Canned Vegetables*

Can openers probably will do more than their usual share of work in 1937 and 1938 if consumers take advantage of the record supplies of canned vegetables which are moving on to retailers' shelves at prices averaging from 20 to 25 percent less than during the past season. Consumers who were forced in the season just ended to curtail purchases of canned vegetables because drought boosted prices can get their innings now from the bountiful supplies. Unless demand for the big pack steps up considerably, the end of the canned foods season next summer may see big surpluses carried over to the 1938–39 season. Due to large supplies, wholesale prices probably will remain close to their present level until some indications of the size of the 1938 pack are available next summer.

Total canned vegetable supplies this season are expected to be the largest on record and from 15 to 20 percent in excess of a year ago. Record packs of sweet corn, lima beans, snap beans, and beets are in prospect. Substantial increases over a year ago are reported for all other vegetables except tomatoes and asparagus. These estimates do not include frozen vegetables which still constitute a very small part of the total pack of processed vegetables. Volume of quick-frozen vegetables, particularly peas and lima beans, is expected to be larger than a year ago.

Quantity purchasers of canned vegetables will find Government reports on acreage and production for manufacture, as well as trade reports on stocks and prices, helpful in determining when to buy their supplies. Government reports on acreage are issued in April, while production reports appear from June through October. When smaller supplies are in prospect, it generally is advisable to contract before the pack is under way in order to purchase goods at the old low price level. When larger supplies are expected, the best policy is to wait until prices are adjusted to a lower level.

Sweet corn looms as the largest single item in this year's pack. Peas and tomatoes follow closely after. Generally tomatoes rank first, with peas and sweet corn next in order. The sharp reduction in yields resulting from unfavorable growing conditions in August and September caused tomatoes to topple from the head of the list. Last year tomatoes were the only canned vegetable to escape serious drought damage.

Sweet corn pack is the largest on record and is about three-quarters larger than a year ago. Wholesale price of No. 2 size standard white whole-grain corn in November was 20 cents a dozen below a year ago.

Record canned green pea supplies also are in prospect this season, and prices have dropped to low levels. Total supplies probably will be one-quarter larger than in 1936–37 and substantially above the supplies handled by canners in past years. This will tend to keep prices close to their present level during the remainder of the current season. In early November No. 2 size cans of standard Alaska peas were wholesaling at 23 cents a dozen below a year ago.

Canned tomato supplies most likely will be about the same as in 1936, but slight increases are expected in supplies of tomato juice, tomato pulp, and other tomato products. Wholesale prices probably will remain at their relatively low 1936 level. Tomatoes are the only major canning crop not to show a sharp increase in supply over 1936. The size of this year's pack was reduced by intense heat and excessive rain late in the growing season.

Record snap-bean pack has pushed down wholesale prices from the relatively high level reached last season to lower levels. Total supplies are expected to be about one-third larger than last season and considerably above average despite a small carry-over. Wholesale prices this season probably will not change much from present levels. In early November the wholesale price of No. 2 cans of standard cut green beans was 20 cents a dozen lower than a year ago.

Current pack of beets, lima beans, and kraut likewise are expected to be larger than a year ago. But the asparagus pack is about one-eighth smaller than in 1936 and prices have advanced to higher levels. Complete records of the pack of minor crops are not now available. However, it appears that production of lima beans for canning will be one-quarter larger than in 1936, while this year's record beet production most likely will be a third above a year ago. Some downward revision of the indicated one-sixth increase in kraut production over 1936 may be necessary because of weather damage to the crop.

CONSUMERS' QUERIES AND COMMENTS

[Concluded from page 2]

shoes among the photographs used with this article was not a calculated oversight. I am sure you will realize that we do not have limitless resources which we can use in obtaining photographs. We obtained the best pictures available to illustrate the important facts covered in the text on types of leathers, construction, and fit of shoes. Were we not operating under limitations in resources and space, there are many other photographs, including some on kid shoes, which we would like to run.

"Your next point refers to suede. You state: 'The paragraph stating that most suede footwear is made of calf, ignoring completely the fact that millions of feet of kid suede is sold each season to shoe manufacturers. . . .' The paragraph you refer to reads: 'Most of our suede footwear is made of calf finished on the flesh side, but *suede shoes may be made of many different leathers.* . . .' Sources of our statement are these:

"AMERICAN LEATHERS, by American Leather Producers, Inc., p. 53. 'Calf suede is by far the most important suede leather used in shoes. . . . So for practical purposes "suede shoes" mean calf shoes.'

"SHOE AND LEATHER LEXICON, 9th Revised Edition, published by the Boot and Shoe Recorder Publishing Co., p. 69. 'Suede—Method of finishing leather, or the leather itself . . . now almost universally made from calfskin.'

"You state, next, that 'the statement that genuine kid leather is not used for shoes is absolutely incorrect, as millions of kidskins are used by the various tanners.' The text of the article reads this way: 'Genuine kid leather is not used for shoes. Kid shoes . . . are really made from the skins of goats.' These two sentences were intended to be read together. (A semicolon, instead of a period, between them would perhaps have made this clear.) Our authorities for these statements are:

"HIDES AND SKINS, by John R. Arnold, p. 425. 'The name kid is a mere survival which deceives only the layman. True kidskins are not obtainable in quantities large enough for economical operation of an industry using the chrome process. . . . In the United States the consumption of true kidskins is now, as it has always been, negligible.'

"SHOE AND LEATHER LEXICON, 9th Revised Edition, published by the Boot and Shoe Recorder Publishing Co., p. 36. 'Kid—Shoe leather made from the skins of *mature goats.* The skin of the young goat or "kid" is made into the thin, flexible leather used in the making of kid gloves, being too delicate for use in shoes.'

"THE SHOE INDUSTRY, by Frederick J. Allen, p. 90. 'Kid is the name for leather made from skins of full-grown goats, coming mainly from the mountains of India, Europe, and South America.'

"Our references to kid shoes were meant to convey the idea, supported by the authorities quoted above, that the skins of mature, rather than immature, goats are used in making the shoes which are sold as 'kid.' If this is not correct, I would appreciate your telling me where I can find well-supported data on the number of shoes marketed today which are made from the skins of kids, or immature goats. I have been unable to locate any such data myself, nor have any of the standard reference books thrown any light on the subject.

"The confusion that has apparently arisen in your mind as to our meaning in writing of 'genuine kid leather' prompts me to ask you if there has been any definition of 'kid,' as referring to 'kid shoes' and 'kid gloves' which has been worked out between interested industries and representative consumer organizations. I believe that many consumers are under the impression that 'kid' means the skin from immature goats. In your opinion, do you believe it would be helpful to consumers directly, and to your industry indirectly, if some mutually understandable definitions were arrived at through conference between your Guild and bona fide consumer organizations? You have perhaps been following the efforts of such trade associations as the National Retail Dry Goods Association in working out definitions of terms used in describing textile products. The wool industry has also taken steps toward clarification of descriptive terms in the trade practice agreement it has worked out with the Federal Trade Commission. I should be glad to know what you think might be done by the Kidskin Guild to clarify in consumer minds what the trade means when it speaks of 'kid shoes' and 'kid gloves.' "

WHEN YOU BUY COAL

[Concluded from page 11]

weights and measures official can check back on it if necessary. Careful consumers know their local law and show a healthy curiosity about its enforcement.

Economy in heat comes not only from buying the economical kind of coal and knowing you are getting all the coal you are paying for. Choosing the size to fit the fire pot in the furnace is important, too. Egg coal ordinarily should not be used in fire pots which are less than 24 inches wide and 15 inches deep. Stove coal takes a fire pot that is at least 16 inches wide and 12 inches deep. Chestnut coal may be burned in fire pots that are 20 inches wide and 10 inches deep. The smaller sizes require small measure grates and special drafts. These sizes are used, however, with automatic stokers, and in some cases the savings resulting from the use of smaller coal sizes may make the installation of an automatic stoker economical.

Keeping costs down depends, too, on the furnace and the fireman. Coal burned in a properly tended furnace will be more efficient than coal burned carelessly. Coal burned in a furnace in good repair will be more efficient than coal burned in a furnace that is in disrepair.

Proper firing of the furnace is important in obtaining full fuel value for the fuel dollar. For full information about firing, consumers should write to the Superintendent of Documents, Washington, D. C., for the Bureau of Mines' publication, "Questions and Answers for the Home Fireman." Enclose 5 cents in coin. Generally, one rule is to use uniformly sized coal. Another is to maintain a uniform fuel bed without holes and adjust dampers to maintain an even flow of heat. Most common mistake of home firemen is to burn their furnaces furiously for a short time, then shut them off.

Most fire builders, too, build fires first with a layer of paper, then a layer of kindling, and finally a layer of coal. The better way is to reverse this process. Starting with the coal, then putting on the kindling and the paper on top of the coal results in less smoke and more complete burning of the gases given off. In adding coals to a going fire, instead of shoveling the coal directly on the fire, home firemen should first push the hot coals to the back or to one side of the furnace, thus creating a pocket down to the grate where the fresh coal is shoveled. This, too, reduces the loss in heat up the chimney.

PROOF OF THE PUDDING

[Concluded from page 13]

final results of this experiment are correlated they will go to bread producers who may profit by it.

The Bureau has conducted a number of other taste tests. In one they fried potato chips in different types of fats to find the ones best adapted for deep-fat frying. In another they tried the different kinds of fats in biscuits to test the effect on flavor. From year to year tests are made of soybean varieties, potato varieties, and of the various production factors that influence the table quality of potatoes.

In all these cases the value of the taste test lies in the fact that it enables the producer to estimate how consumers will react to his product. And he can look to the experimental data to find how to meet their preferences.

STUDY QUESTIONS FOR THIS ISSUE

1. What were 3 of the activities engaging Food and Drug officials last year?
2. What is coal composed of?
3. What is the smoke that comes from the burning of coal?
4. What is the source of most of the heat from coal?
5. What is a "smokeless fuel"?
6. Why does the price per ton of coal not necessarily represent the cost of the heat obtained from the ton?
7. What are the relative advantages and disadvantages of hard and soft coal for home use?
8. How does coke differ from coal?
9. Does your local weights and measures law define the number of pounds in the ton of coal sold in your community?
10. What are 3 economy rules for home firemen?

OUR POINT OF VIEW

The CONSUMERS' GUIDE believes that consumption is the end and purpose of production

To that end the CONSUMERS' GUIDE emphasizes the consumer's right to full and correct information on prices, quality of commodities, and on costs and efficiency of distribution. It aims to aid consumers in making wise and economical purchases by reporting changes in prices and costs of food and farm commodities. It relates these changes to developments in the agricultural and general programs of national recovery. It reports on cooperative efforts which are being made by individuals and groups of consumers to obtain the greatest possible value for their expenditures.

While the CONSUMERS' GUIDE makes public official data of the Departments of Agriculture, Labor, and Commerce, the point of view expressed in its pages does not necessarily reflect official policy but is a presentation of governmental and nongovernmental measures looking toward the advancement of consumers' interests.

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Tips to consumers who want to make their coal dollars count in maximum fuel values.

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Science may measure to a fineness the nutrients in food; experts in the externals of food may rate its eye appeal: but when it comes to appetite appeal, it's taste that counts. The Bureau of Home Economics tells here in word and picture how it makes taste tests.

Death to Food Fallacies 14

Some can be costly in money; others costly in health. Here are a few false, foolish, or half-true ideas about nutrition to unload from your pack of prejudices.

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VOLUME IV, NUMBER 19 DECEMBER 13, 1937

ONE DAY WITH A WEIGHTS AND MEASURES OFFICIAL

CONSUMERS' Guide

Issued every two weeks by the
CONSUMERS' COUNSEL DIVISION
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Men, say the predominantly masculine service station operators in Richmond, Virginia, are more careful shoppers at automobile service stations than are women.

This is one of the observations that emerged from tabulations of results of the contest which the ingenious Bureau of Weights and Measures of that city recently staged.

Less to measure the shortcomings of consumers than to educate the man at the pump in the importance of accurate measuring of this consumer product, this contest provoked city-wide interest in weights and measures problems which are the subject of our lead article in this issue.

Richmond's lively Weights and Measures bureau believes that one route to observance of rules for honest measures is to see that sellers of goods know the law and understand the whys and wherefores of legal standards and enforcement. Earlier this year (see Consumers' Guide, April 19, 1937) the Richmond bureau worked up a quiz for grocery clerks which sent them scurrying to look up the law and learn its regulations for honest weighing and measuring.

Prizes, five of them, ranging from $50 for the first down to $2.50 for the fifth, proved a lure to service station workers in this second educational campaign. Judges of the answers to the 25 posers were the State Supervisor of Weights and Measures, a Richmond businessman, and the Secretary of the League of Virginia Municipalities.

What is the difference," commenced the list of questions, "between a liquid quart and a dry quart?" (A dry quart contains 67.2 cubic inches; a liquid quart, 57.75.)

Some of the other questions, with answers that rated correct with the judges, were:

What should a Weights and Measures official do with your equipment if it is not susceptible of satisfactory repair? (Confiscate and destroy.)

Where and *why* should the price per gallon be posted on the pump? (In full view of customer and for his information.)

How should a vehicle tank, used in dispensing petroleum products, be marked? (Each dome as well as the outlets should be marked with indicated capacity and each outlet should be marked with a number designating the compartment.)

Should a station operator check deliveries of motor fuel before or after delivery? (Before and after.)

Where should the indicator be placed on a tank truck and how? (In the dome of each compartment, and in a manner so that it can be easily sealed.)

What is meant by the term "priming" as applied to a gasoline meter pump? (It means getting the whole line completely full from foot valve to hose nozzle end.)

Where should the indicating element be when the pump is not in operation? (Zero.)

How should lubricating oil be marked? (With trade name, brand, and S. A. E. number.)

What kind of a device is required in the delivery of grease? (One that will become inoperative when the supply of grease is exhausted.)

When a pump is condemned who has the authority to break the seal? (The repair man, provided he replaces the same.)

Can you use weighing and measuring devices before they are tested and sealed? (No.)

Is motor fuel or gasoline colored for a specific purpose, if so, why? (To distinguish one brand from another.)

What is a meter? (A device measuring liquid volume continuously.)

Which is the legal way to sell gasoline, by dollar and cents worth or by measure? (By measure.)

Who loses the motor fuel which evaporates while dispensing into the tank of your car? (The station operator.)

Ladies be careful and check your purchases," the Bureau chief warned after tabulating results from his educational contest, "for this contest developed the fact that while you were the most agreeable, you were the most careless. We asked the question: Which is the most troublesome to wait upon, man or woman? Seventy-five percent of the contestants said *man.* We are inclined to congratulate the men. All should watch or check their transactions. We should see that we get all that is coming to us. Sixty-eight of the contestants reported that businessmen check their purchases.

"We were surprised," continues the Bureau chief, "to find 4 operators in the city who thought it right to sell gasoline by a unit of money. The law demands that liquid commodities be sold by liquid measures. Listen to what one contestant has to say about the question of selling by cents' worth: 'The legal way to sell is by measure, the gallon being used as a standard amount.' Note," says the Bureau Chief, "this operator will never be in trouble by selling dollars' and cents' worth."

One Day with a WEIGHTS AND MEASURES OFFICIAL

THE TELEPHONE rang in the office of the Deputy Commissioner in charge of the Division of Weights and Measures of the New York City Department of Public Markets, Weights and Measures.

"Somebody wants to speak to you, Commissioner," said his secretary.

While the Commissioner took the phone, we glanced around. Headquarters for New York consumers' guardian of honest weights and measures was a large rather bare room in an unpretentious office building some blocks away from the imposing Municipal Building. From it we looked out across blocks of old loft buildings; beyond them, we knew, struggled many of the city's pushcart markets.

"It's Tony ———," said the Commissioner as he put down the phone. "He wants us to investigate a 'friend' of his in the market; says he is giving short weight . . . Some 'friend', Tony, eh?" The latter remark to us.

We did not try to probe the tieup between friendship and honest weights and measures. "Will you investigate?" we asked.

"Sure," said the Commissioner. "We'll inspect this man's scales."

"Suppose they are all right?"

"Fine; nothing lost anyway. Once a year we have to inspect every weighing and measuring device in the city. Whether we do it in the course of our routine, or on a complaint from a customer or a merchant, does not matter. If the man's scales are O. K., he has nothing to worry about, of course. His customers won't be disturbed by the inspection. If the scales are not right, well—then, we appreciate the complaint."

The Deputy Commissioner to whom Tony ———, running a little poultry stand in one of the city's markets, could make direct appeal for justice against an allegedly dishonest competitor, returned to our interview, and his explanation of the work of the Division of Weights and Measures.

Dependent upon the vigor and thoroughness with which the Division does its job, he said, are 7 million people, who consume about one-seventh of America's total commercial production of perishable foodstuffs. Meat, poultry, bread, milk,

One of the jobs of the 85 men and women on the field staff of New York City's Weights and Measures Division is to check on the accuracy of scales used by big and little merchants.

Ballyhoo comes seldom to most weights and measures officials, standing guard day after day over the millions of inches and ounces of consumer goods bought and sold. We dispatched our reporter to spend a day with one such official, in charge of New York City's service. . . . .

fruits and vegetables, groceries, butter and cheese, all are subject to daily supervision by the Division. In addition, the Division stands guard for the consumer of such diversified products as coal, ice, laundry service, gasoline, toilet paper, cosmetics, medical supplies, thread, cloth, carpets, oilcloths, paints and varnishes, beer, wine and liquors—since these too are sold by weight or measure or numerical count.

Dependent too upon the Weights and Measures Division are the honest merchants. For they are penalized if, while they give fair measure, count and weight, they have to meet the competition of a careless and dishonest minority. Weights and Measures inspectors stand guard for the conscientious dealer as much as for the consumer.

A force of 85 men and women are in the field every day. Equipment with which they do the job includes a large testing truck with heavy duty scales of 40,000 pounds' capacity, for the testing of coal scales; and ten small cars with "false tanks", for measuring gasoline gallonage.

Last year the Division inspected 111,496 places of business. Inspectors tested over 265,000 weighing and measuring devices. Of these 3,600 were ordered repaired, over 5,000 confiscated and dumped at sea. Less than 4 out of each 100 scales tested were deceptive—a small chance for error, perhaps, but a sizable threat to fair trading. No one knows how many transactions were carried through on those scales found faulty, nor how many consumers may have had their confidence in all retailers jolted by the discovery that they had been short weighted by one.

A quarter of a million packages were inspected, and 19,000 were found incorrectly labeled for weight and measure, or not labeled at all. 1,750,000 yards of thread and tape were measured.

These are some of the tasks of New York City's Weights and Measures Division. With some 40 percent of wage earners' budgets going for food, and perhaps another 10 percent for drugs, cosmetics, piece goods, coal, gasoline, and other items sold by weight or measure, the importance of weights and measures supervision stands out clearly.

New York City's Weights and Measures Division spent $127,932 during 1936; its receipts from license fees were $75,700; from penalties on violations, $24,560. Its net cost to the city was therefore only $27,672.

How much is this, in terms of the things people buy? Suppose that the whole cost of weights and measures enforcement were to fall upon a single commodity. If that were, let us say, onions, it would mean that New York housewives would pay only 1½ cents on every 10,000 pounds of onions, to insure true weight and measure for all the things they buy. If it were butter, it would mean a levy of 1 cent on every 10,000 pounds of butter. Yet there are hundreds of commodities passing over retail counters, bought by weight and measure or count.

One of the ingenious ways of making an accurate scale record an inaccurate weight is discovered here by an official.

"How much, in dollars and cents, do the Division's activities save New York householders?" we asked. Between us, we agreed there was no way to tell, since there was no imagining what the situation might be without weights and measures protection. The Commissioner preferred to hazard a guess at what remains to be done. "Most merchants are of course honest. But, through the carelessness and dishonesty of a few, I should guess that, on the average, the housewife is still being gypped a total of perhaps ten cents a day on short weight and measure." This is only a guess, he emphasized—but it indicates the amount of illegitimate tax on daily shopping transactions. The Weights and Measures Division is working to wipe out that illegitimate tax, and it requires the cooperation—in their own cause—of all housewives and honest merchants.

The Commissioner chuckled as he described a unique educational stunt his office had used to focus public attention on its work. His men had borrowed a Department of Sanitation truck, loaded it with several thousand confiscated scales, and specimens of scale-testing apparatus, and sent the truck on a tour of the city. At markets and busy shopping centers a representative of the Department spoke briefly, explaining to consumers some of the tricks they needed to watch out for, and reminding merchants of easy conscience that the Division was on the job. Crowds of shoppers got a brief introduction to the mysteries of weights and measures protection. A few merchants, however, while learning rapidly, missed the point of the exhibit. Some days after the truck had visited a neighborhood, weights and measures inspectors discovered copies of condemned devices in new use.

The ingenuity which has devised the instruments that record weight

Getting honest weights and measures is as much a consumer responsibility as an official duty. New York's officials dramatized this fact by sending a truckload of confiscated scales on tour through the city.

with precision sometimes seems to be almost equalled by the ingenuity which devises methods to force instruments to record a weight greater than the actual load on the scale. New York's Weights and Measures Division exhibit carried many versions of the "million dollar scale"—so-called because it is supposed to make a million dollars for its user. One such scale with a 20-pound capacity had its face removed and a 25-pound face substituted. A merchant using such a scale in weighing out potatoes, for instance, can collect for 12½ pounds while weighing out only 10 pounds.

Another scale had a hatchet head fastened underneath the pan. This was simple for the inspector who seized it, but many housewives had failed to notice that the marker was not at zero when the pan was empty.

To the platform of an expensive computing scale, a butcher had tied a string, which was then attached to a kind of pedal—all out of sight of the customer. A gentle pressure from the unscrupulous merchant's foot, resulted in extra poundage recorded by the scale.

Some scales give wrong weight and deceive the customer without benefit to the owners. Personal weighing machines are popular in subway and "L" stations, railroad terminals, and drug stores. Many of these, officials found, had been allowed by repair companies to get out of adjustment. The Department's annual report for 1936 describes the results of a check-up on personal weighing machines:

"This type of scale has a capacity of 300 pounds, and many of them were found to be from 3 to 150 pounds out. Some of these machines issue a ticket giving the weight and telling the fortune of the penny depositor. It was nice to learn, in this connection, that a 50-pound test weight was possessed of a soul and a bright future; that it was charming and had a sensitive disposition, a charitable nature, many friends, and would live to a ripe old age." Samples of these scales were in the truckload of exhibits.

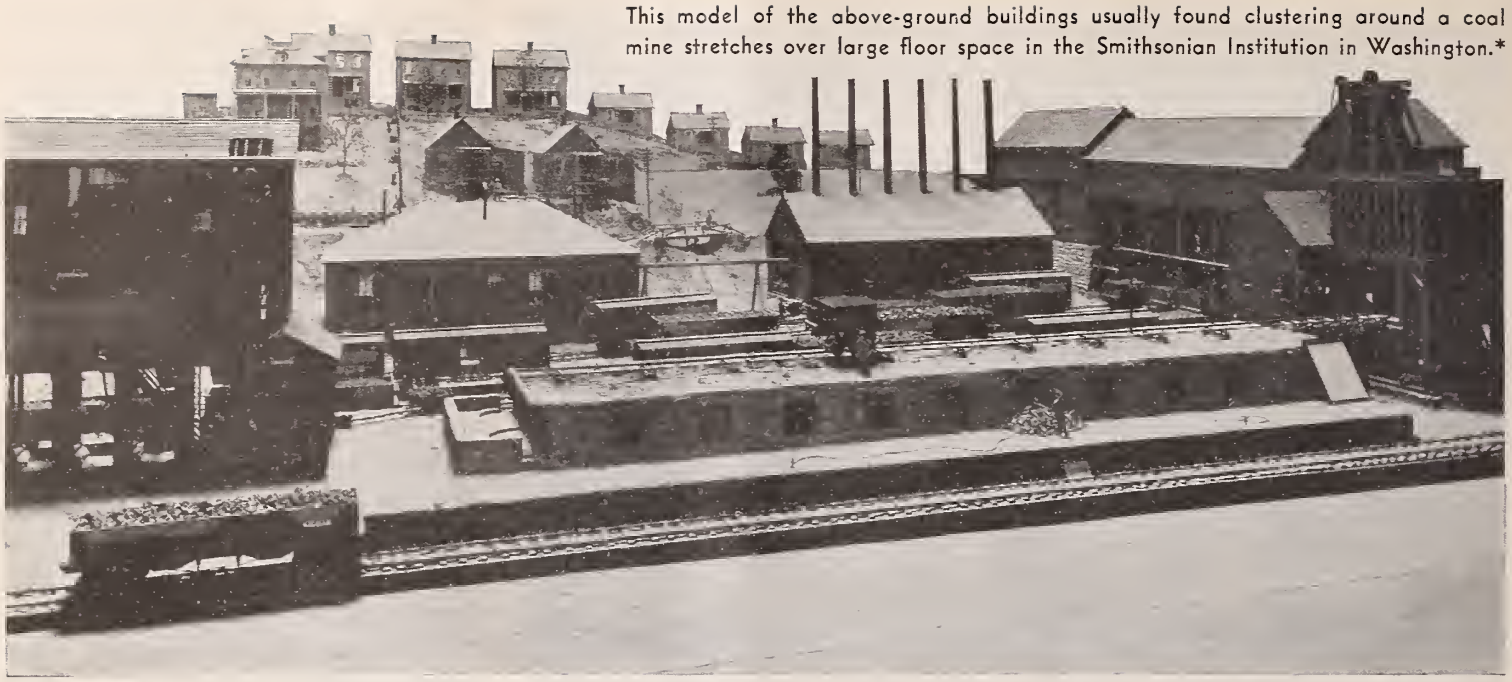
"But don't say too much about the phoney scales," warned our weights and measures official. To our question, "Why?" the Commissioner gave two reasons: the honesty of the average retailer, and the Division's emphasis on its other activities.

Most merchants, he pointed out, are of course honest, and undue attention to the shifty fringe may give a wrong impression of the trade as a whole. Perhaps even more important, he added, preventing or punishing short weight is only one part of the work of the Weights and Measures Division. Misleading advertising and deceptive containers, for example, are frauds on the public as bad as the more obvious practice of short weight.

A retail butcher had advertised a certain cut of meat at the bargain price of "14¢ a lb." Customers who came to his store found a sign with 14¢ written large across it, but a little "½" figure above the pound mark. Customers were told the meat was 14¢ a half-pound. To weights and measures inspectors who came on complaint, the price was quoted as 14½ cents a pound. This retailer was obliged to discontinue his false advertising.

Deceptive packages may be harder for the shopper to see through. The Commisioner showed us a half-pound box of "selected" fruits and nuts, bought at a large variety store. The box was correctly labelled half a pound. The first of its three layers showed through cellophane, attractive with a dozen morsels of solidly packed dried fruits and nuts. The second layer turned out to contain only four pieces of dried prunes; the bottom layer had only four pieces of dates. Below the surface layer, both variety and quantity were abandoned. The Commissioner's first warning to the store produced from the manufacturer a box with two layers, in which only the

[Continued on page 18]



This model of the above-ground buildings usually found clustering around a coal mine stretches over large floor space in the Smithsonian Institution in Washington.*

A Consumers' Counsel for Coal

Guardian of consumers' interests in the price-fixing and industry-regulating operations of the National Bituminous Coal Commission is the Consumers' Counsel, whose office marks a milestone in the development of democratic government. What his job is and how he is going about it are told here.

THE CARTOONISTS' subject at last has an official friend in Washington. The funny, worried little fellow in nothing but a barrel has been recognized by Congress. The Guffey-Vinson Act, the Bituminous Coal Act of 1937, was enacted to cure the ailments of an industry whose own trade practices had not only made it an economically sick enterprise but had seriously imperiled a vital natural resource. Specifically the Act declares that the regulation of interstate commerce in coal is "imperative for the protection of such commerce."

Immediately after creating a commission to regulate interstate commerce in bituminous coal, Congress saw to it that the ultimate user of that commodity should be protected. Hence the second thing done by the Guffey-Vinson Act was the creation of the office of Consumers' Counsel and the grant to it of functions unique in Government.

John Carson, Consumers' Counsel of the National Bituminous Coal Commission, has his headquarters office in Washington, D. C.

For the first time an agent of Congress—the Consumers' Counsel is appointed by the President with the advice and consent of the Senate but reports the results of his activities "directly to the Congress"—is ordered to participate independently and vigorously from the consumers' point of view in the regulation of an industry important to sixty million customers. Nothing can be done in the regulation of bituminous coal without his knowledge. That, perhaps, is the most important phase of his powers.

Coal itself is a complex thing. Compressed within its black mass, we know, are whole cycles of life in a prehistoric past. From it come such wide needs of today as the perfume for a lady's hair and the roaring power of a railroad locomotive. Nature brings it within man's reach in 31 States and in Alaska—sometimes beside a navigable river or where a railroad runs; sometimes on a mountainside to which it is difficult to build a road or trail. Sometimes it may be shoveled from the surface into a car or truck. Again it may involve miles of expert tunneling.

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* *The series of pictures on pages 7, 8, and 9 (with the exception of the first on page 7) are photographs of the Smithsonian (U. S. National Museum) model.*

The commercial structure based on coal is just as complicated as coal itself. A map showing the movement of coal in the United States looks like a sheet of shatterproof glass with 31 bullet holes in it. The cracks and striations from those bullet holes cross and parallel and double and merge in a pattern conformable to no logic. Before its intricacies the best informed consumer might well throw up his hands.

As a matter of fact that is just what the consumer has been doing. Price, without consideration of quality, has all too often been the sole basis upon which coal was bought. And with price the predominant consideration, the coal industry itself was forced to ignore logic in its own development. That illogical development brought about the very state of ruin in the industry which Congress is now seeking to correct. Mine owners found themselves unable to sell coal for what it cost to produce it. Wasteful methods of mining and deplorable living conditions for mine communities resulted from their efforts merely to keep their businesses alive.

In drawing the Bituminous Coal Act of 1937, Congress approached the problem with thousands of pages of testimony before it. Since 1913 the bituminous coal industry has been the subject of inquiry by Congress itself, by business scientists, and by the courts. With all these voluminous reports before it, Congress deemed it wise to turn over the difficult job of doctoring the sick industry to a commission of 7 men, a majority of whom must have expert knowledge of coal, 2 as former producers and 2 as former miners. Salvation of the bituminous coal industry, so far as prices, proper marketing rules and trade practices were concerned, it decreed was a matter for experts.

But Congress did not stop there. For the first time in the history of such legislation, it decided that the protection of the consumer was likewise a matter for experts. And they gave the cartoonists' worried little fellow in the barrel his official friend, a Consumers' Counsel, before the court of experts at Washington.

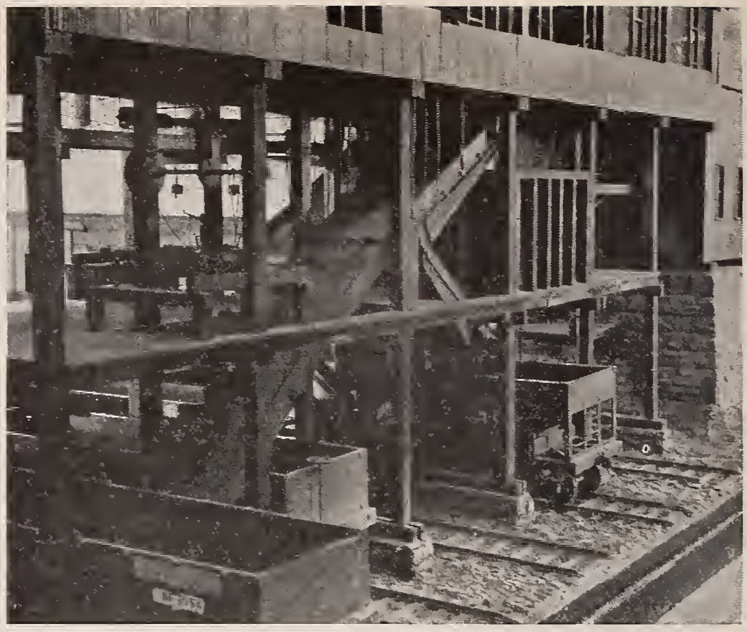
That office, headed by John Carson, is manned by legal and economic experts. Through the powers granted it by Congress it can avail itself of all the information bearing on coal in the hands of the National Bituminous Coal Commission and of other departments. It can require the Commission to conduct investigations, to subpoena witnesses, to permit its representatives to examine and cross examine witnesses, and to participate in almost every activity of the Commission looking to the administration or enforcement of the law.

Powers both of the Commission

Mining coal is difficult and dangerous work. Here two miners are drilling a hole in a coal vein before blasting with a dynamite charge. This is an important step in extracting coal for consumers' coal bins.

Most coal mines have complete railroad systems of their own for removing coal. Small cars like this one bring the mined coal from points, sometimes miles underground, to the tipple.

As the small freight car leaves its subterranean route, it proceeds up a small incline to the tipple where the cars dump their cargo and return to the mine for another load.



Nerve-center of every coal mine is the tipple. Here the coal, received from underground, is screened into various sizes, sometimes washed and crushed, then dropped into the waiting freight cars.

and the Consumers' Counsel extend from the mine to the wholesaler or distributor in interstate commerce. They do not, however, reach to the ultimate retailer who sells to household consumers.

To the Commission, Congress has given the power to fix minimum prices below which producers of coal may not sell their product. No one flat price, but thousands of minimum prices are to be fixed, one for each kind of coal from each mine in the country and each is to be quoted for each marketing area within which the coal is to be sold to a distributor.

For a producer in Pennsylvania, for instance, who has 3 mines and produces 10 different kinds of coal, 30 different prices will be in effect. If this producer sells all of his coal in Washington, D. C., there will be one set of 30 prices below which he must not sell. If he sells part of his coal in another marketing area, such as Illinois, there will be another set of prices. It is the job of the Commission to determine these prices on the basis of the average production costs in a mining area plus costs of transporting coal to different marketing areas, at the same time maintaining, insofar as possible, existing competitive relationships within the industry.

Furthermore, Congress has given the Commission power to fix the gross margin on which wholesalers of coal may do business. At that point the Commission's power stops. It has no power to tell retailers how much they may charge. Neither has the Consumers' Counsel. What the Consumers' Counsel will be in a position to do is to advise every consumer at what price his retailer buys supplies of each kind of coal. With such information, consumers can figure for themselves how much of their coal dollar goes to their local merchants, and how much to producers and wholesalers.

To help consumers to realize how very real is their connection with the office of Consumers' Counsel, how essentially their interests are being represented at every discussion of the complex problems of the coal industry, Consumers' Counsel John Carson proposes to summon a Consumers' Price Conference in Washington after the Commission, now at work on its first schedule of prices, makes its report.

Such a conference cannot be explained in a sparkling epigram or a few neatly turned paragraphs but it will be as vital to a consumer as his own pay check and should be at least as interesting as the fortunes of his favorite football team.*

Shortly after the passage of the Act, letters began to arrive from civic minded women and domestic consumer, civic and trade bodies alike, all asking the Consumers' Counsel essentially the same questions: "What does the regulation of prices by the Coal Commission really mean? How will it affect me and my family? How can I be sure that I am getting a fair deal when prices are fixed? What does the Consum-

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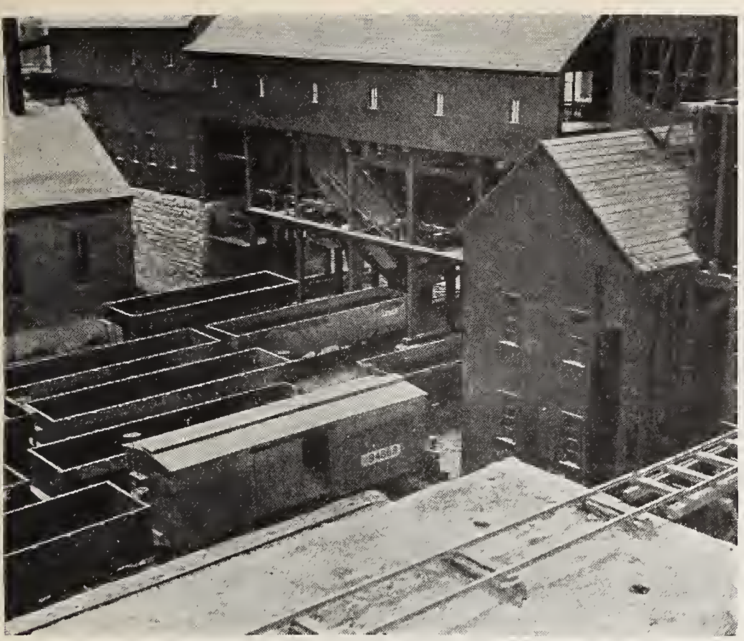
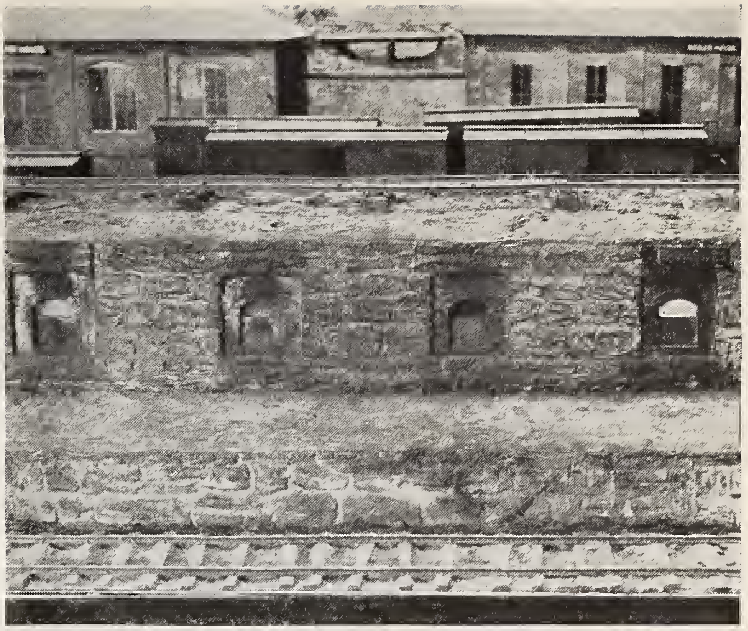
**As we go to press, this conference, summoned sooner than anticipated, is actually meeting in Washington. In a later issue we will report its activities. Consumer organizations which wish to be represented at any future conferences called should get in touch with the office of Consumers' Counsel, National Bituminous Coal Commission, Washington, D. C.*



This is how the tipple appears viewed from the opposite side. Freight cars are lined up waiting to be loaded. At the extreme right is the building in which some of the mined coal is washed and crushed.



Beehive ovens, like these, are familiar sights to train travelers passing through coal mining districts. At night the dull red glow reflected from them can be seen for miles. These ovens are used for making coke.

ers' Counsel propose to do to protect our interests while prices are being fixed?"

The answer is simple: The Consumer's Counsel proposes to make readily available to the consumer the fullest possible knowledge of the commodity he is consuming.

Tracking down the facts that consumers need is not so simple. It involves finding the answer to such questions as these: Why does West Virginia coal move to and through the coal fields of Ohio, Indiana, and Illinois? Why does Pennsylvania coal compete at the pit mouth with coal mined in Iowa or Colorado?

These coals, and others in similar situations, have been able to move far afield, absorbing twice and three times the freight charges carried by rival coals. The formula prescribed by Congress for the Coal Commission on which to base prices of coal seeks to bring the average return to each field up to the weighted average cost of production, in other words to prevent generally the cutting of prices below cost. The formula has many factors. It must take into account uses for different types of coal. It must classify coals, so that coal from one area can be compared with coal from other areas. It must preserve competition.

With most consumers it is almost second nature to believe that consumers' interests are best protected by fair competition between the people who make and distribute the goods we buy. Fair competition is consumers' guarantee that they will get goods at the lowest possible cost. What are the chances for that kind of protection under the coal act?

Most coal authorities anticipate that under the control program laid down by Congress practically all coal will be sold at the minimum prices set by the Commission. They expect that regulation of prices will discourage competition in price but encourage competition in quality and service which producers and distributors offer to buyers.

Protection of consumers' interest in quality and service is a major concern of the Consumers' Counsel. His office is laying the foundation for this by gathering together material which will help consumers large and small, to judge claims as to quality and service made by bitterly rival salesmen seeking their business.

Distinguishing between types of coal has always been a fairly simple task for the large buyer of bituminous coal. Most purchasing agents know the general qualities of coal from each field and each mine. They buy at least in carload lots. They know definitely where their coal comes from. Furthermore, when buying in lots of several hundreds of thousands of tons, it pays these buyers to make their own check analyses of the coal from time to time. They send samples to any one of scores of commercial laboratories and receive independent reports as to heating values, volatile matter, ash, clinker, sulphur, and other deleterious or valuable chemical contents.

Average household consumers, of course, can afford no such check on quality. What, then, is their protection? As in the purchase of most of the commodities consumers buy, their principal protection is the honesty and responsibility of the retailer.

But long experience in all commodities has shown that the honest dealer is helped—and certainly the consumer generally is better protected—by fixed standards of quality easily ascertainable. It is one of the bases for government grading of meat and meat products which the CONSUMERS' GUIDE explained not long ago. It is the basis for the adoption by various trade associations of codes for advertising and selling.

For large consumers much work along these lines has already been done. Before a recent hearing of the Commission, Henry T. Coates of the National Association of Purchasing Agents, described the results of 10 years of work by his Association, the Bureau of Mines, the American Standards Association, and the American Society for Testing Materials. These organizations have evolved a formula under which all coal can readily be classified according to properties which buyers seek, or seek to avoid, in coal. John Carson has urged upon the Commission the adoption of this formula as the standard, so far as it is applicable, for compulsory quality grades. In urging adoption of these standard terms by the Commission, he says:

"It seems self-evident to the office of the Consumers' Counsel that since the Nation has taken cognizance of the distress of the coal industry, the Nation could not properly ask less in return than that the coal industry make available to all consumers the information here proposed. After all the Nation, in fact and effect, is the consuming public. . . . One of the major purposes of the National Bituminous Coal Act is the stabilization of the coal industry. This stabilization can succeed only to the degree that known standards are set up and made available to the public.

"Prices to be paid after classification standards and coal prices have been established are of no greater importance to consumers than their assurance of the right to know the actual value to them of the coal purchased. Governmental departments in the purchase of coal are now requiring the same information as that which this office recommends be made available to all consumers. Large and small consumers also are demanding this information with increasing emphasis. The number of domestic consumers receiving such information and profiting by it necessarily would increase at an accelerated pace, for sales competition would inevitably cause retail dealers to inform themselves and then make it available to their customers."

Simple and forthright as these assumptions seemed, there nevertheless appeared at this hearing evidence of reluctance on the part of some producers to have any part in making this sort of information generally available. The principal fear expressed was that if definite information on the characteristics of various types of coal should be made available, the consumer might frivolously shift his purchases from one mine or one field to another. Representatives of the Consumers' Counsel pointed out that consumers were already doing this and that their reasons for shifting, without definite knowledge of the character of the coals concerned, were undoubtedly far more frivolous than such reasons would be if consumers were possessed of the fullest knowledge possible regarding the relative quality of different coals.

The Coal Commission is now in the throes of setting up major price schedules for the industry. Collateral issues—such as this requirement for defined standards in classification—have had to wait, however essential to an ultimately fair price structure these issues may be.

To clear them up, to give the Commission an adequate picture of just what the consuming public wants and expects from the administration of this new law, is one of the purposes of the meeting of consumers called for the time at which the Commission sets prices. At that time the methods of sampling and analyzing coal will be graphically shown and discussed. A motion picture has been made of the sample of coal going through the laboratories of the Bureau of Mines in Pittsburgh, with an explanation of just what each test means to the man who will ultimately burn that coal in his firebox. Representatives of the office of Consumers' Counsel will be on hand to discuss with consumers from every part of the country just what information is available today and to hear from them just what information they want to have made available.

Coal is still the most important and most widely used single source of energy in the United States. It is estimated that some sixty million persons still depend upon it. More than that, geophysicists tell us that the supplies of oil and gas in the United States are definitely limited and that with consumption at the present pace, the day is definitely calculable when known reserves will be exhausted. Fortunately these same geophysicists assure us that the known reserves of coal are so extensive that their exhaustion cannot be foreseen under any calculable demand that may be put upon them within any reasonably predictable period of time.

Coal is and will continue to be a natural resource vital to the Nation. Congress has set up the Coal Commission to see that it is not wasted or lost through selfish exploitation within the coal industry. But Congress has likewise set up the office of Consumers' Counsel to see that the consumer shall not be exploited by even the most enlightened experts in the coal industry itself.

Buying Bedspreads

Durability in a bedspread depends largely on the material used in it. You have a wide choice in color, fabric, and design, but for good wear a firmly and evenly woven material is the wisest purchase. . . .

A minor item in most household budgets, even bedspreads require careful selection if money spent for this commodity is to count its most in durability. . . .

IF YOUR great great grandmother—a great grandmother or just a grandmother will do in a pinch—wove woolen coverlets in a proverbial log cabin, and you still have these coverlets, then you will probably not have to buy a bedspread for the rest of your life. Unless moths eat the heart out of them, these homespun coverlets seem never to wear out. They are fashionable for beds old and new, but are so scarce and expensive that most of us who travel light with little heirloom luggage must content ourselves with machine-made spreads and coverlets.

For bedspreads new, there are numerous materials of different texture and design to choose from. But how to find the bedspread that fits the pocketbook, one's furniture, and gives good service, is the conundrum. A dainty lace spread over a pastel lining goes beautifully with fine furniture, but is hardly the thing for the bedroom of rough and tumble boys. Young boys are apt to be hard on spreads and the constant admonition, "take care of the spread," would undoubtedly be hard on their spirits. A taffeta spread may be handsome and give just the note of elegance to your room which you would like. But for how long? It's rather a hazardous guess. Very little taffeta today is made out of pure silk. Silk taffeta is often so heavily weighted that it soon splits to pieces. Most of the taffeta spreads nowadays are made from rayon.

Whatever you pay for a spread is up to you. The material you choose depends on your personal taste, but the wearing quality of that material depends on the kind of yarns used in it and the manner in which they were woven. Materials firmly and evenly woven of smooth regular yarns are more durable than those

The attractive scalloped edge has a utilitarian purpose. Its stitching should be deep and close enough together so that there will be no danger of future raveling.

made of heavy yarns in the warp and fine yarns in the filling. The latter may be "appealingly different," but they may wear indifferently. The fine yarns may break. Often, for the sake of novelty, uneven or lumpy yarns are used in a fabric. It may give the material an attractive texture, but these heavy places in the yarn have a way of wearing through the fine yarns.

If you are looking for durability in a bedspread, then, select a firmly woven fabric. In a sleazy loosely woven material, the yarns soon shift out of place making thin spots and later, ugly holes. You can get some conception of the firmness of the weave by pulling the material and examining it to see if each yarn stays in its place. Designs in fabrics are sometimes created by "floating" one yarn over a number of yarns. If the floats are too long or loose, the yarn will catch and hence break easily. Be sure that all the yarns have a place and stay in it.

Finish of a bedspread is important, too, both for neatness and durability. The fewer seams it has the better. Seams have a way of pulling out and are difficult to mend. Be sure that the seams have been made deep enough to hold well. Bedspreads are often hemmed all the way around or are finished with a scalloped edge. If hemmed, be sure that the stitches are close enough together so that they really do their work. Fourteen stitches to an inch is a good average. Back stitching at the end is a good insurance against ravelling. When embroidered scallops finish a spread, be sure that the stitching is deep and close enough together so that all the raw edges are held in their place. Also select a spread in which the thread matches the spread. This is an indication of good workmanship.

For appearance sake examine the ends of the spread to make sure they are cut straight. They may look straight but after the first washing, if their true nature is crooked, it will surely be revealed. You can tell if the cutting job has been well done if you use as a guide one of the crosswise yarns in the fabric and notice if the end runs parallel to it.

To show or not to show the pillows on your bed? Decide that question before you get a spread. Spreads for double beds vary from 80 to 90 inches in width and 90 to 114 inches in length. The smallest size will not stretch over the pillows while the 108 or 114 inch length does and gives you a generous tuck-in besides.

Though there's a wide variety of fabrics to choose from, materials for bedspreads fall into a few general classes such as crepe, Marseilles, damask, chintz, taffeta, lace, candlewick tufted and the Colonial coverlets.

For lots of hard wear, for painted beds and plain sturdy beds, the crepe seersucker with its alternating plain and crinkled stripes is a popular choice. Both kinds of stripes are woven into the fabric and are permanent. The smooth stripes will stay smooth and the crinkly ones will remain crinkly after each laundering. Seersucker spreads do not need to be pressed if they are hung up straight to dry. When the straight and crepy stripes of a seersucker are of different colors, it means that the yarns used in them have been dyed before weaving and will hold their color well. Sometimes seersucker spreads are all one color. In that case, they are usually piece-dyed, that is, dyed after weaving. Piece-dyed fabrics may not be as color fast as yarn-dyed materials.

Plisse spreads are imitation seersucker. Instead of the crepe stripe being woven into the material, as it is in a genuine seersucker, it is made by a printing process. An alkali solution is applied to the parts of the cloth where the crinkly texture is desired. The chemical causes the yarns to pucker up. At first glance, a plisse spread may look just like a seersucker, but you can tell the difference if you stretch each one. With a little pulling, the crinkly stripe of a plisse spread will straighten out, though it will reappear again when you release the cloth. After a few washings though, it may disappear for good. Usually plisse spreads come in white or delicate pastel colors. They are soft, light in weight, and appropriate for summer use.

For those who like the texture and appearance of dimity, there is the dimity crepe bed spread. An occasional heavy warp yarns gives the fabric the corded effect characteristic of dimity. At the same time, these lumpy yarns unbalance the weave. The material is probably not as durable as one that is evenly constructed, but it makes an attractive spread. Often rayon is mixed with cotton fibers in dimity fabrics to add richness to the material.

Most everyone has slept at some time or other under a Marseilles spread. The old-style Marseilles which were made of double-faced fabrics with a raised pattern, came out of every washing looking like new. They were practical, wear-forever spreads. Marseilles spreads are made today of single-faced fabrics. The design is produced by an extra set of filling which alternates on the right and wrong side. To get good service out of a modern Marseilles spread, choose one with a small design. For the smaller the design, the less distance does a filling yarn have to be floated before it is caught in the fabric. Long-floating yarns tend to catch easily, snap, and break. These spreads are not piece-dyed. The filling yarns that make the design are usually dyed a pastel color and the yarns in the foundation are a near white, or it may be the other way around, the design yarns white and the foundation ones cream. Either way, the result is the same. The entire spread has a pastel color tone.

Damask bedspreads, if of good quality, are extremely durable. They have the added attraction of being reversible. Either side can be made the right side. They come in two color combinations and are woven in a pattern to fit the top of the bed. High grade damask is more firmly woven than any of the crepes or Marseilles, but there are some sleazy damasks on the market, too. In spreads of inferior quality, the yarns slip easily, the material frays, and the seams are apt to pull out.

Chintzes, glazed and unglazed, in bright or subdued colors, decorate the windows and beds of many American homes. They may liven up a room if the room is large enough to take their gay designs. If your bedroom is spacious and has early American style furniture, it probably can stand the pattern and ruffle of a chintz spread. Usually these spreads have a narrow strip of material sewn to each side of the center width. The seams are on the right side and bound with a tape that harmonizes with or matches one of the colors in the material. Before buying one of these spreads, be sure to examine the seams. The stitching should be deep enough to hold and the binding should be caught on both the right and wrong side. Glazed chintz sheds dust easily but it sheds its glaze, too, when washed. Unglazed chintz soils more quickly, washes well and does not show every wrinkle as the shiny material does.

If you like some shine on your bed, you will probably warm up to the many materials made of synthetic fibers. Rayon combined with other fibers is being used more and more for bedspreads. All-rayon spreads, like glazed chintz, muss easily. For real service, they should be dry-cleaned rather than washed.

[Concluded on page 19]

The designs which pleased our grandmothers still appeal. Reproductions of old coverlets can be obtained in modern weaves.

COOPERATION

Delegates of cooperative societies scattered between Maine and Washington, D. C., met at the annual convention of the Eastern Cooperative League at New Haven, Connecticut, October 31. The League is the educational headquarters for consumer cooperatives in that part of the country; the Eastern Cooperative Wholesale the central buying organization. E. C. W. reported to the League a 90 percent increase in business since the last convention 18 months ago, and an increase in the number of urban cooperative societies and buying clubs in its membership from 45 to 195. Of these 75 hold membership in the League.

Federation of cooperatives is taking place not only on a regional basis but in local, county and statewide leagues that give added strength to each cooperative society, pool experience, avoid duplication of activity and consolidate educational work. Such federations, the Eastern Cooperative League delegates were told, are now functioning in Connecticut, Greater Boston, New York City, Westchester County (New York), New Jersey and the District of Columbia. The League voted to encourage the formation of such local federations.

Southern Minnesota farmers, who felt there was too great a spread between the price they received from packers and price they paid to local meat markets, organized a cooperative butcher shop in Bricelyn, Minnesota, a year ago last summer. Purchasing ten dollar shares and hiring an experienced butcher, they report they were soon benefiting at both ends—as producers, by getting a higher price for their cattle; as consumers, by getting better grade meat at lower prices. The discovery that consumers and producers could profit together—especially when they were the same people—has increased the cooperative's membership to 800 families. Bricelyn itself has a population of only 508, but many members come from communities 30 or 40 miles removed.

Organized in 1926 with a capital of $10,000, the Farm Bureau Mutual Automobile Insurance Company today has resources of over $5,500,000, and serves 180,000 members in 9 States and the District of Columbia. It has just received a license to extend its service to New York State. This cooperative ranks number 7 in size among the country's mutual casualty companies.

Gross margins and operating expenses have both gone down for the group of gas and oil cooperatives whose business records are analyzed in the 1937 Co-op Oil Year Book compiled by the Midland Wholesale Society.

Eighty-five gas and oil cooperatives and nine oil departments of co-op creameries reported gross margins of 21.065 percent, and operating expenses of 15.684 percent, for 1936. These figures compare with 21.732 percent margins and 16.112 percent operating expenses for the 68 co-ops reporting for 1935. Total net income dropped from 6.302 percent in 1935 to 6.057 percent last year.

Total sales in 1936 for the 94 cooperatives amounted to $4,264,929. Of the gas and oil societies, nine did a business of over $100,000; five fell within the $75–100,000 range; nine into the $50–75,000 class; 32 did over $25,000 but less than $50,000; and 30 societies sold less than $25,000 worth of products. The nine creamery oil departments averaged only $15,876 in sales.

The statistics are further analyzed by the Cooperative Auditing Service to give light on such perennial problems of the cooperative society as capitalization and credit sales. Accounts receivable in these 94 co-ops and creamery oil departments and in 11 large general mercantile co-ops, which have recently added petroleum products, averaged an amount equal to 22 days' sales. For the oil co-ops alone, the average was 26 days' sales outstanding, for the creamery oil departments only 12 days. Smallest co-ops were deepest in credit sales. Oil co-ops with an annual volume under $25,000 averaged 35 days' sales outstanding. The Cooperative Auditing Service comments that "at least half of the sales should be cash, with the accepted credit limit at 30 days," which would reduce the accounts receivable to no more than 15 days' sales.

Keeping books in a small cooperative taxes the time and ingenuity of a manager. With the manager busy with other duties, and often untrained in bookkeeping, the records may be far behind or incorrect. Yet the success of the cooperative is bound up with the accuracy and "usability" of its books. . . . Four small Minnesota gas and oil co-ops—Sauk Center, Fargo, Glenwood, and Belgrade—have begun the experiment of a central bookkeeping office. At Sauk Center the books for all four societies will be kept by an experienced full-time man, with a modern machine to aid him. Local managers and boards will get reports at regular intervals.

Meet Rochdale, Mississippi. The new post office takes its name from the town in Lancashire, England, which is known as the birthplace of consumers' cooperation. Located on the Delta Cooperative Farm, Mississippi's Rochdale combines producers' and consumers' cooperative activity. The Delta Farm, established less than two years ago, began—like the Rochdale Pioneers almost a hundred years ago—with 28 families. The co-op store has just paid a 5 percent patronage refund, after taking out 3 percent for interest on borrowed capital, and 3 percent toward repayment of principal. The store sells not only groceries, dry goods, drugs, and gasoline, but also milk from the members' cooperative dairy, vegetables from their garden, and chickens and eggs from their poultry farm.

Five cooperative cottonseed oil mill associations will crush about 100,000 tons of seed this season, according to the Cooperative Division of the Farm Credit Administration. This is a small percentage of total American cottonseed production, but it doubles last year's cooperative mill tonnage figure.

Two of the 5 mills are in operation for the first time this year. The oldest mill has been going for 15 years; 2 others for the past 3 seasons. Total assets of all 5 mills come to almost a million dollars, though individual mill worth ranges from $90,000 to about $300,000.

Last year the 3 cooperative mills were able "to return to their patrons, exclusive of reserves for capital purposes, a price for seed which, on the average, was higher than the prices prevailing in the areas served by these mills. In addition, there is little doubt but that the operation of these cooperative oil mills has had some effect in raising the general price level of seed in their immediate territories."

For over half a century farmers have been cooperating to insure themselves against windstorms. The oldest mutual windstorm company was incorporated in 1884 in Iowa. Today this company has over $550,000,000 of insurance in force, for about 150,000 members.

Sixty-five mutual companies specializing in windstorm protection now insure about 800,000 members for $2,750,000,000. While most of these companies write only windstorm insurance, some also write hail insurance. Windstorm protection is also extended along with members' fire insurance, by some 250 farmers' mutual fire companies with a membership of 873,000.

Cost of mutual windstorm protection has been quite low. According to the Farm Credit Administration, which has just made a study of windstorm mutuals, the average annual cost for all companies for which records are available, during the 50-year period, 1885–1935, was 12½ cents per $100 of insurance. Average annual costs for the 5 years, 1931–1935, ranged from 8 cents per $100 of insurance in 1932 to 18.8 cents in 1934. Costs by States during these five years varied from 7.5 cents for Iowa, to South Dakota's 21.1 cents, per $100 of insurance.

National book club is the latest venture of organized cooperation, launched by a group of consumers who consider books important consumers' goods, and cooperative buying as their method. Describing itself as "a new association of those people who want to own and read more good books than today's book prices permit," the Cooperative Book Club has opened offices at 5 West 57th Street, New York City.

Over 800,000 boxes of oranges and grapefruit were marketed during the 1936–1937 season by the Waverly Cooperative Growers whose bright and shiny Florida packing house is shown here. Twenty-three years ago this growers' cooperative started with 8 members; now it has 162. Not only does it market its members' fruit, but it also purchases farm supplies cooperatively, maintains a mixing plant which sells to members fertilizer at lower cost and known quality, and furnishes members with a grove caretaking service.

Your Food Supplies & Costs

For the second month in succession the retail cost of the foods in the consumer's market basket moved down and on November 16 reached its lowest point since December 1936. Marked break in meat prices again was the major factor behind lower food costs, but the decline in meat costs, especially in beef, from October 12 to November 16 was much larger than in the preceding month. Only food groups to advance during the period were eggs and dairy products.

Spread between food costs in 1937 and 1936 has narrowed considerably since May when the 1937 high was reached. In mid-November the items in the consumer's market basket cost 1.4 percent more than a year ago compared to 8 percent in mid-May. However the cost of eggs and fruits and vegetables was considerably less than last year. On November 16 the index of retail food costs as reported by Bureau of Labor Statistics was 83.6 percent of the 1923–1925 average compared to the high of 106.7 percent in November 1929 and the low of 65.6 percent in November 1932.

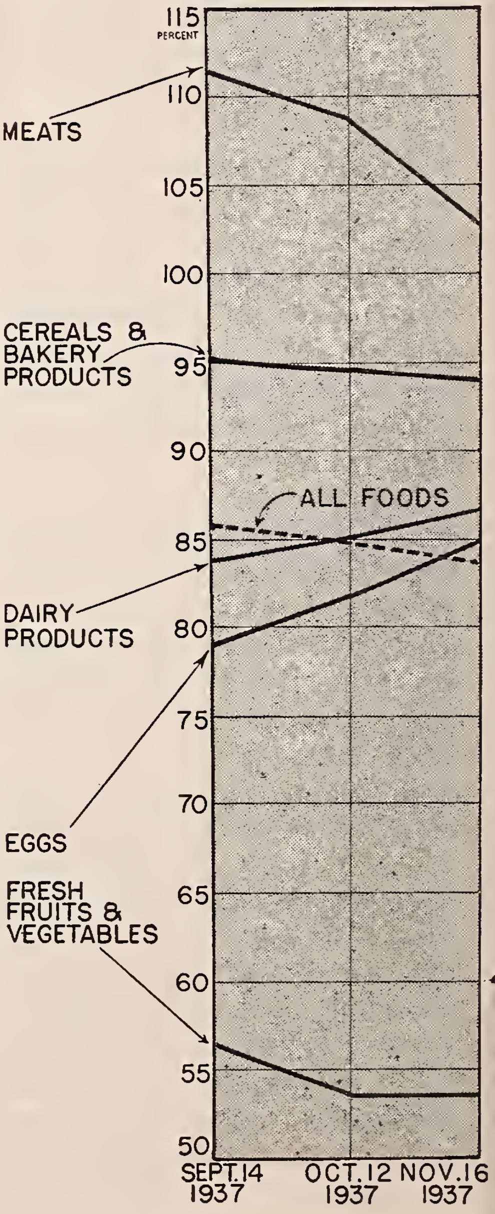
Retail food costs in southern and western cities on November 16 were lower than last November despite a national average slightly higher than in 1936. Compared with a year ago the advance in food prices has occurred primarily along the Atlantic seaboard. In New England cities costs were 5 percent above the corresponding period last year, but in southeastern cities costs were 2 percent below.

Meat costs registered the sharpest decline in the food groups from October to November this year with practically every item moving down in price. This drop cancelled most of the sharp summer and fall price advance and carried costs back to their mid-June level. Fruit and vegetable costs went down slightly, with lower prices for dried peas and beans the major factor. Most noticeable change occurred in oranges, which dropped 11 cents a dozen to their lowest level since last January. Lower rice, corn meal and flour prices resulted in a slight reduction in the cost of cereals and bakery products. Lard led the downward parade of all fats and oils. The seasonal advance in dairy products carried butter prices to their highest level since 1930. The egg price advance again was less than usually occurs in this month.

Butter prices are expected to reach their peak in December and then to move down until next June. From October 12 to November 16 retail butter prices went up 1 cent a pound and were 3.5 cents a pound above last November. Recent high prices have resulted from milk production lower than a year ago coupled with a marked reduction from 1936 in storage holdings. Most of the increases have occurred in 92 and 93 score butter, widening the spread between these grades and 90 score butter. Butter prices during the first half of 1938 probably will average about the same as during the first half of 1937.

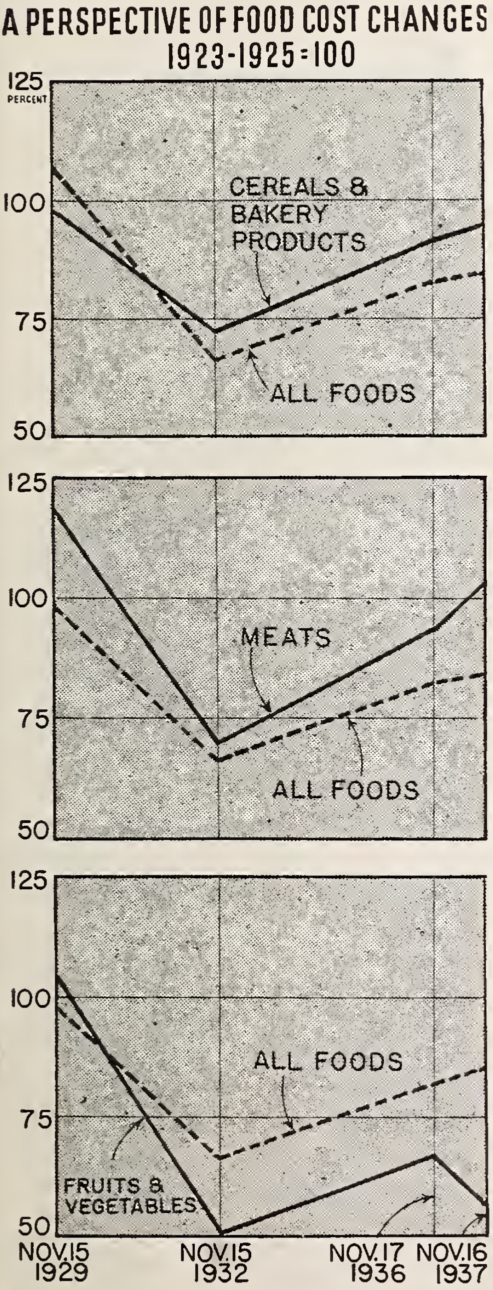
Peak in egg prices appears to have been reached and a downward price trend is in prospect until April or May. Temporary price increases, however, often occur during the winter. Extremely low temperatures not only check production increases but also block deliveries to markets. The recent wide spread between top and average grade eggs has narrowed considerably due to seasonal production increases of Pacific Coast eggs. But the price reduction from a year ago is still most marked in the average grade eggs. Most eggs now in storage will move to markets prior to the end of Janu-

A CLOSE-UP OF FOOD COST CHANGES
1923-1925=100



ary. The large size of storage holdings probably will tend to keep average grade egg prices during January considerably below their level a year ago, unless there is a period of extremely cold weather. On November 16 retail egg prices were 2 cents a dozen higher than on October 12 but 3 cents a dozen less than last November.

Better grade beef prices are expected to decline more than usual during the first half of 1938. Choice and prime cattle still continue in limited supply with bulk of slaughter consisting of short fed cattle—those fed on corn for 60 to 120 days. These cattle generally grade good. Quality of new crop cattle is expected to improve steadily as cattle fed longer periods move to market. Smaller supplies of lower grade cattle are in prospect, due to the end of the range season.



Retail beef prices registered their sharpest price decline of the year as steaks and roasts, respectively, went down 4 and 2 cents per pound from October 12 to November 16. Prices are only slightly higher than last November with the advance in steaks and roasts about 3 cents per pound.

Hog price declines during the remainder of the winter probably will be small. Most of the autumn price decrease appears to have occurred. Fresh pork prices may not show much further change but cured products probably will continue to move down since they do not reflect changes in hog prices until several months have passed.

First substantial decline of the year in retail prices of smoked pork items occurred from October 12 to November 16 as prices of all pork cuts went down. From mid-August to mid-October prices of fresh pork went down sharply but prices of smoked items continued moving up. During the month ending November 16, however, prices of ham and bacon, respectively, dropped 3 and 2 cents per pound while fresh pork was from 2.5 to 3 cents a pound lower. Lard declined a cent per pound. Compared to last November price changes per pound are: bacon up 3 cents, fresh pork up 2 cents, sliced ham up 1 cent, and lard and whole ham slightly lower.

Record production of dried beans has caused sharp price declines. Prices reached relatively high levels in mid-June due to the effect of the 1936 drought on production. The drop in retail prices since mid-June has ranged from 1.5 to 3.5 cents per pound.

Canned vegetable prices to consumers do not appear to have reflected fully the marked reduction in wholesale prices which occurred this fall and winter. Total canned supplies this year are the largest on record and from 15 to 20 percent bigger than a year ago. Wholesale prices of standard canned peas, corn, and green beans in early November were from 1½ to 2 cents a number 2 size can lower than last November. However on November 16 retail prices of canned corn and green beans were only one-half a cent a number 2 can less than a year ago, while canned green peas were practically the same.

Fall and winter vegetable prices may average above their last year's level. Acreage planted to these crops is slightly less than a year ago but above average. Production was sharply reduced by freezing temperatures in Florida and Texas, two of the major winter vegetable producing areas. In Florida tomatoes, snap beans and peppers appear to have suffered the most damage. Prices probably will advance temporarily until supplies are available from the later winter producing area.

Tomato supplies from December through February come primarily from Cuba and Mexico. Florida is the principal source of supply from late February until late in May. Tomato prices ordinarily are highest during the winter months and then decline until they reach their low in the summer and early fall. Exports of tomatoes from Cuba probably will be less than last season.

Citrus fruit prices reach their season's low point from December through February. Prices of tangerines or "kid glove" oranges usually hit bottom in December. Orange prices are cheapest in January, but December and February average prices usually vary little from this low point. Lowest grapefruit prices come in February.

ONE DAY WITH A WEIGHTS AND MEASURES OFFICIAL

[Continued from page 5]

one unseen layer was a disappointment. The second warning brought the store's promise to withdraw the item altogether.

Bacon packages several years ago were a sore spot. Packers were putting up bacon in 6-ounce packages, and many retailers were passing these off as half-pounds. More than 100 storekeepers pleaded guilty to this fraud. Of course housewives were to blame for not checking each package against the requested amount (and in some cases for not even knowing that 6 ounces do not make half a pound). A program to educate housewives was part of the remedy, and has been going forward. But the 6-ounce package, so close to the customary half pound, remained an invitation to deception. The Department went to the source of the difficulty. Nine local packers met with department heads last year, and agreed to discontinue the packaging of bacon in 6-ounce lots.

A commodity whose sales bulk large in New York City is Jewish unleavened bread, eaten chiefly at the Passover holiday and to a lesser extent the year round. Known as matzoth, it is sold in large oblong crackers, in bulk and in packages. Five-pound packages have been standard in the trade. Not long ago certain manufacturers began clipping an ounce or two from the 5-pound box. Other manufacturers went them a little better, and package content gradually came down in most cases to 4 pounds 10 ounces. Weight was correctly labelled on the packages, but consumers had not been educated to the new size, with the result that retailers were sometimes found to be taking advantage of their ignorance. Inspectors making the rounds asked for 5 pounds of matzoth and were given the 4 pound 10 ounce package. In a campaign during the Passover season, 1,100 violations were thus detected. Retailers then began to distinguish to their customers between 5 pounds and 4 pounds 10 ounces. Some manufacturers, under pressure from retailers, restored the 5 pound box.

A new ordinance in New York makes a license compulsory for every seller and repairer of re-built or used scales.

If the housewife buying a dozen bananas or half dozen eggs gets short count, she has chiefly herself to blame for not detecting the error by doing her own counting. Some objects which are sold by count, however, cannot be so easily checked. Last year the Weights and Measures Division bore down on one fraud in the sale of toilet paper. Rolls marked "1,000 sheets" were found in a number of cases to contain only 900 sheets. The Division's vigilance thus freed consumers of an illicit ten percent tax on a household necessity.

Most of the work of the Division is routine and unspectacular. Checking every weighing and measuring device in the city once a year makes no headlines. Consumers do not see the weights and measures inspectors on the job. From time to time a special campaign on one type of violation may be launched, and only then does the city read anything in the newspapers to indicate that its Weights and Measures Division is doing a job.

Itinerant pushcart peddlers are New York's own problem. There are 3,000 licensed itinerant peddlers over whom the city has some supervision by virtue of its power to revoke licenses if their scales and measures fail consistently to conform to standard. But there are, according to the estimates of the Weights and Measures Division, between 5,000 and 7,000 unlicensed "floaters" over whom the city has no control whatsoever.

The Department of Public Market recognizes that pushcart peddlers perform a useful service. Says the Commissioner of Markets in his annual report for 1936, "... it must in fairness be admitted that the peddler does render two very distinct services: he sells food at a price within the means of the poor, and he helps absorb the surplus which frequently gluts our wholesale food markets. When the better produce has been picked up by the higher type buyers, the peddlers descend on the markets and shop for the leftovers and bargains."

In the regular open pushcart markets in the city, where peddlers return to the same stations every day, a supervisor of Markets, Weights and Measures checks regularly on scales and measuring devices used. Scales of the itinerant peddlers, however, may escape inspection.

In a drive last summer 80 percent of the scales of itinerant pushcart peddlers that were examined had to be confiscated; 600 scales were confiscated within a single month. Many got out of order accidently; others not so accidently, inspectors discovered when they found peddlers using small coins hastily to screw scales back into working order as inspectors hove into sight.

Seeking to get at the heart of the irregular scale problem, New York's

Municipal Assembly last February passed an ordinance making a license compulsory for every seller and repairer of re-built or used scales. Each repair job on a weighing or measuring device must be reported to the Weights and Measures Division. Testing equipment used by scale repairing concerns is compared at least once a year with the standards maintained by the Weights and Measures Division. New York became the only city in the country with such an ordinance; in only one state, Vermont, is there a similar law. Its efficacy was demonstrated in New York when a number of second-hand scale dealers retired completely from business as the Weights and Measures Division launched a drive for enforcement of the new ordinance.

These are some of the ways in which the Division of Weights and Measures in New York City protects the millions of people who are daily buying foodstuffs, cloth, gasoline, coal, and all the hundred and one items that—in tens of thousands of stores and gas stations and push-carts—are sold by weight, count and measure. The Deputy Commissioner of the Weights and Measures Division compares his job to that of the police and fire departments. They protect the property of citizens from theft and fire, while weights and measures inspectors are safeguarding the cash of millions of housewives as it is being handed out in the endless daily transactions which go to make up the business of running a household, and safeguarding property of honest sellers of goods from unfair competition in the form of short weight and false measure.

The Weights and Measures Division has to hand out fines, occasionally send people to jail, and cancel licenses. But as far as possible, its work is not punitive, but educational. Toward the goal of honest weights and measures in New York, the Division is working hand in hand with reputable merchants and with consumer groups. The more they take upon themselves the job of educating their members to defend themselves, the more successful the Weights and Measures Division regards itself.

BUYING BEDSPREADS

[Concluded from page 13]

The cheaper rayons are extremely shiny. Fibers in the better quality spreads are usually delustered. As rayon frays easily, seams should be generous and the stitches deep enough to hold the material. Cording or other decorative joining on a seam does not mean added strength, and it may be concealing a very narrow seam. The fewer seams, the better in rayon spreads.

Eighteenth century housewives liked candlewick tufted bedspreads. They went well with their furniture. They were easy to make, easy to launder, and were very durable. The old candlewick spreads were usually made of unbleached muslin and the white tufts were evenly distributed over the whole cloth. Today, other materials are used and the tufts which may be any color in the rainbow are placed on the bedspread in various designs. If the foundation cloth is firmly woven the tufts usually are permanent. In the poorer quality spreads, some of the tufts may pull out, or may lint a little, but on the whole, these spreads will stand hard wear and are good buys. They wash well and require no ironing if, when hung out to dry, they are hung up straight.

Again, back to the grandmothers. In their day it was the vogue to tell the story of "The Arkansas Traveller" or "Jacob's Ladder," or to make hickory leaves or roses or chariot wheels with tiny pieces of calico and thousands of painstaking stitches. Patchwork and pieced quilts are popular today as the top covering for beds—so popular, in fact, that many of the old designs are copied in the machine-made products.

The same holds true of the designs used in the homespun coverlets. You will find the old Colonial designs in modern wool, cotton, and rayon materials, or in fabrics made of a combination of cotton and rayon. These combination cotton-rayon coverlets are lighter in weight than the all wool spreads. They give little warmth, but they wash well and do not muss easily. The rayon is usually used in the filling, making the design. Also these coverlets go well with any type of furniture except massive pieces. For them the straight goods—all-wool or all-cotton—are best.

OUR POINT OF VIEW

The CONSUMERS' GUIDE believes that consumption is the end and purpose of production

To that end the Consumers' Guide emphasizes the consumer's right to full and correct information on prices, quality of commodities, and on costs and efficiency of distribution. It aims to aid consumers in making wise and economical purchases by reporting changes in prices and costs of food and farm commodities. It relates these changes to developments in the agricultural and general programs of national recovery. It reports on cooperative efforts which are being made by individuals and groups of consumers to obtain the greatest possible value for their expenditures. While the Consumers' Guide makes public official data of the Departments of Agriculture, Labor, and Commerce, the point of view expressed in its pages does not necessarily reflect official policy but is a presentation of governmental and nongovernmental measures looking toward the advancement of consumers' interests.

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We dispatched our reporter to spend a day with one such official, in charge of New York City's service.

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Guardian of consumers' interests in the price-fixing and industry-regulating operations of the National Bituminous Coal Commission is the Consumers' Counsel, whose office marks a milestone in the development of democratic government. What his job is and how he is going about it are told here.

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A minor item in most household budgets, even bedspreads require careful selection if money spent for this commodity is to count its most in durability.

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CONSUMERS' Guide

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VOLUME IV, NUMBER 20 JANUARY 3, 1938

WHAT WILL CONSUMERS DO IN 1938?

FOR THE NEW YEAR

FROM QUEEN ELIZABETH'S PRIVATE PRAYER BOOK, 1587

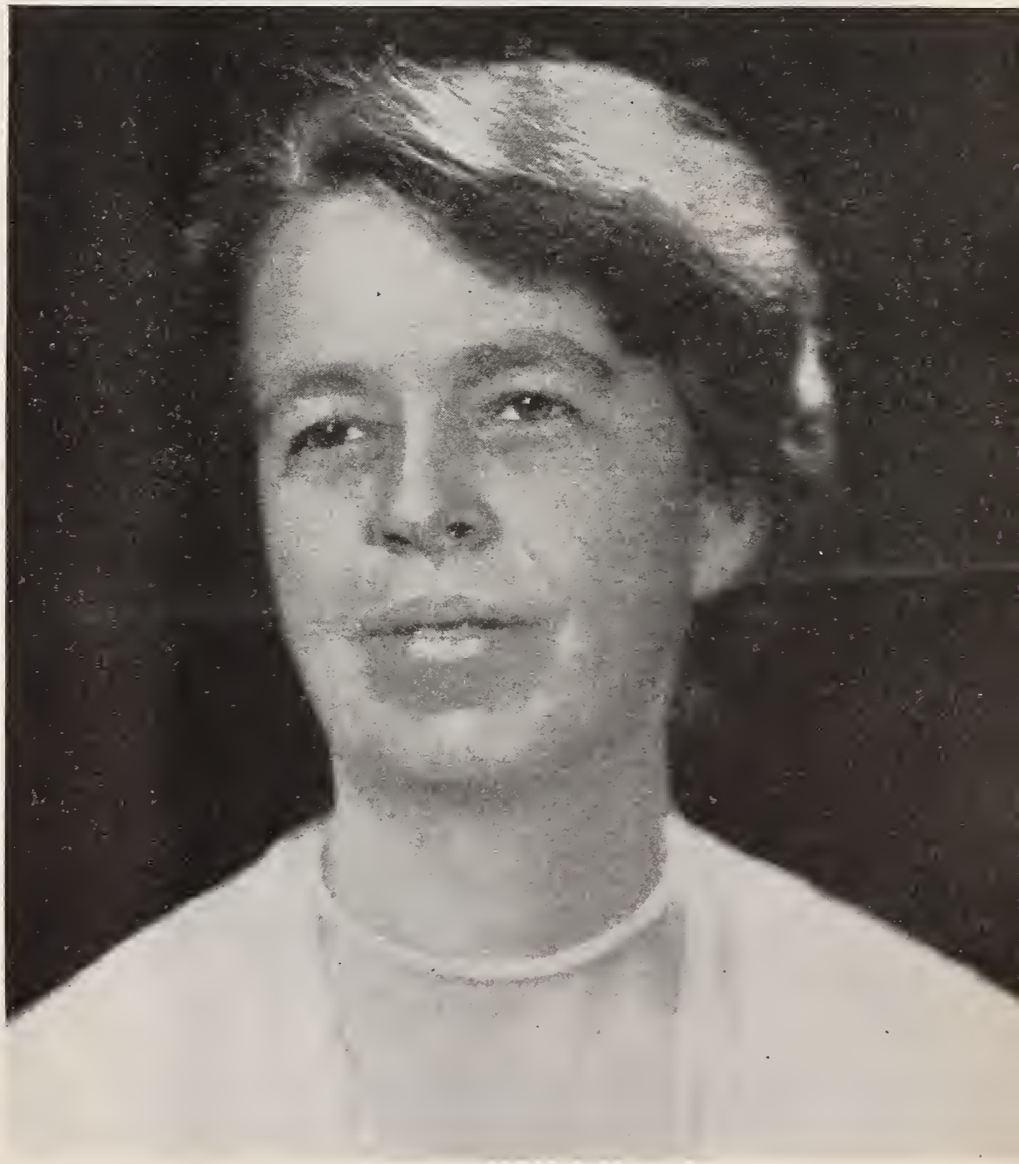
"Thou, O Lord, provideth enough for all men with Thy most liberal and bounteous hand, but whereas Thy gifts are, in respect of Thy goodness and free favor, made common to all men, we, through our naughtiness, niggardship, and distrust, do make them private and peculiar. Correct Thou the thing which our iniquity hath put out of order, and let Thy goodness supply that which our niggardliness hath plucked away."

Resolutions I WISH CONSUMERS WOULD MAKE for 1938

A dozen targets for consumers who want to make their buying power count toward a better new year

I THINK that women as consumers should make it their business to know more about the quality of the goods which they buy, and to consider the conditions under which these goods are produced. If they do this, I feel sure that many changes could be effected which would be beneficial to the general public.

Eleanor Roosevelt



My wish for consumers in 1938 is that they may be aware of consumer needs and producer needs, and of the relationship between the two. Only as people become conscious of this interdependence, are we likely to achieve a fundamental solution of consumer problems and a solid foundation of prosperity for producers. My wish is for united support of measures seeking balanced production of the goods we all need and want, at prices low enough to insure distribution for consumption but high enough to keep the production coming without destruction of our natural resources or of our democratic processes. The ever normal granary plan, adapted to practical programs, will work toward these ends by insuring both farmers' incomes and consumers' food supplies against the risks of alternating gluts and scarcity.

Henry A Wallace

Secretary of Agriculture

I hope that in 1938 consumers will recognize and support the efforts of farmers to carry on and make permanent their program of agricultural conservation. We all have a vital stake in action to safeguard our basic resources. Exploitation of our farms will in the long run hurt us all, for an impoverished soil inevitably means an impoverished people. Conservation on the other hand will make possible continued and efficient production, and with it larger supplies of food and fiber at fair prices for the Nation's consumers.

H. R. Tolley

Administrator,
Agricultural Adjustment Administration

HERE is a resolution for the homemakers of our country: That during 1938 they will give more thought to selecting food that will promote the family's and the nation's health.

The protective foods—dairy products, fruits, vegetables, and eggs—help to safeguard health. Meats, breads, fats, and sugars furnish building material and energy. Quality and price alone are no measure of food value. It is good economy to choose quality and grade to fit the family budget and the family needs. Low-cost foods may yield high returns in food value.

Louise Stanley
Chief,
U. S. Bureau of Home Economics

THE RECENT TRAGEDY from the consumption of Elixir Sulfanilamide in which approximately 100 lives were lost, including many children, aroused national resentment. If the imminent possibility of a repetition of this catastrophe is fully realized it is certain to galvanize an erstwhile inactive interest into an irresistible demand for positive protection.

If consumers resolve for 1938 that food products must be honestly made and honestly sold, then we will get the kind of protection that will make it impossible to market death-dealing drugs.

No more important New Year resolution could be made by consumers than one to evince an aggressive interest in the quality of our food and drug supply.

W G Campbell
Chief,
Food and Drug Administration

FOUR NEW YEAR'S RESOLUTIONS ON COAL AND HOW TO KEEP THEM

1. Know your coal

Know what it contains, where it comes from, its suitability for your purpose, so that you may obtain the maximum heat for the least cost.

2. Know the truth on prices

High retail prices may result from abuse of marketing practices, excessive transportation charges, or a desire for an undue profit. You can now get official information on all these.

3. Know your equipment

Use the type of coal best suited for it. Keep it in good condition. Keep informed of new types of equipment; some of it is so improved as to warrant in savings a complete replacement of even relatively modern heating plants.

4. Know your dealer

The dealer can get analyses of the coals he sells; he can advise you on your equipment; he can explain to you his own cost of doing business and its bearing on the price he asks.

HOW TO KNOW

If you have difficulty in securing information on any of these factors in your heating problem, write to your Consumers' Counsel, National Bituminous Coal Commission, Washington, D. C.

John Carson

Consumers' Counsel,
National Bituminous Coal Commission

FOR over-the-counter buyers throughout the country, I would make the following wishes:

That consumers may more generally accept the fact that a performance specification is the best foundation for intelligent buying, because it insures quality without limiting freedom of choice in other respects.

That consumer groups may cooperate actively with manufacturers in developing performance specifications for goods sold over the counter; that these specifications shall be worked out so effectively that they will be nationally recognized; and that manufacturers will label their goods guaranteeing compliance with these specifications for the convenience and guidance of the over-the-counter purchaser.

Lyman J Briggs

Director,
National Bureau of Standards

THE RESOLUTIONS I wish consumers would make for 1938 are these:

(1) That I shall carefully study the Government grades for canned fruits and vegetables in order that I may know the uses I may make of each particular grade.

(2) That I shall endeavor to have my neighbors and members of my club make similar studies.

(3) That I shall immediately find out what stores in my neighborhood now sell or will get for me canned fruits and vegetables plainly labeled in the terms of the Government grades.

(4) That I shall purchase canned foods labeled with Government terms because I want each item for a specific purpose. When the grade is stated, I can intelligently make my selections, and keep within my budget.

Paul M. Williams
Marketing Specialist,
Bureau of Agricultural Economics

CONSUMERS might make these resolves for the New Year:

(1) That I shall ask my butcher for U. S. graded and stamped beef, lamb, and veal, and U. S. Certified ham, bacon and sausage products.

(2) That in the event he tells me that he does not handle U. S. graded meat I shall continue to ask for it and ask my friends to do the same.

(3) That if I am told that the round purple B. A. I. stamp is the grade stamp I shall correct the statement, because the round purple stamp is a mark of sanitary inspection, not of quality.

(4) That I shall give U. S. graded and stamped meats a fair trial during the year and decide for myself whether grading helps me to select the meats most suitable for my purposes.

C. V. Whalin
Marketing Specialist,
Bureau of Agricultural Economics

For 1938, consumers should resolve to continue to support the Consumers' Cooperatives. Through the Cooperatives, consumers in the United States are finding a means of expressing their vital interests in prices, quality, and organization. During the past year the Cooperative movement has shown marked progress in the United States, and for 1938 the prospects are that its development will be equally as noteworthy.

Director,
Consumers' Project, Department of Labor

Every consumer's New Year's package of resolutions should include a determination to start, to join, and to assist the organization of consumer interests. Consumers must recognize that only through organization can they make known their needs and their wishes in an effective and responsible way. They must resolve to do this job for themselves, with their own funds, and under their own control. Only then will they be able to fulfill their obligations to themselves and to all other groups in the democratic process of give and take. When this is done, consumers may well resolve to demand for their interests the same respect, the same recognition, and the same results as are accorded to any organized group that knows its own business and frankly takes its own part.

D E Montgomery
Consumers' Counsel,
Agricultural Adjustment Administration

Finally, for good measure, and because milk is beyond the reach of millions of children whose bodies are testimony to their need of the kind of nourishment that builds strong bones and sound teeth; and because milk does more for good nutrition than any other single food; and because milk is a source of from one-fifth to one-fourth of American farmers' income; Consumers' Guide proposes that the overproducer and the under-consumer of milk jointly resolve:

That city consumers, wherever they are, get together with the dairy farmers nearest to them and talk over their mutual problems;

That both probe deep into the economics of milk;

That both support any measures or proposals of producers, consumers, industry, or government which give promise of increasing consumers' ability to buy and producers' ability to sell MORE MILK.

CONSUMERS' CALENDAR

THESE EVENTS MADE NEWS FOR CONSUMERS IN 1937

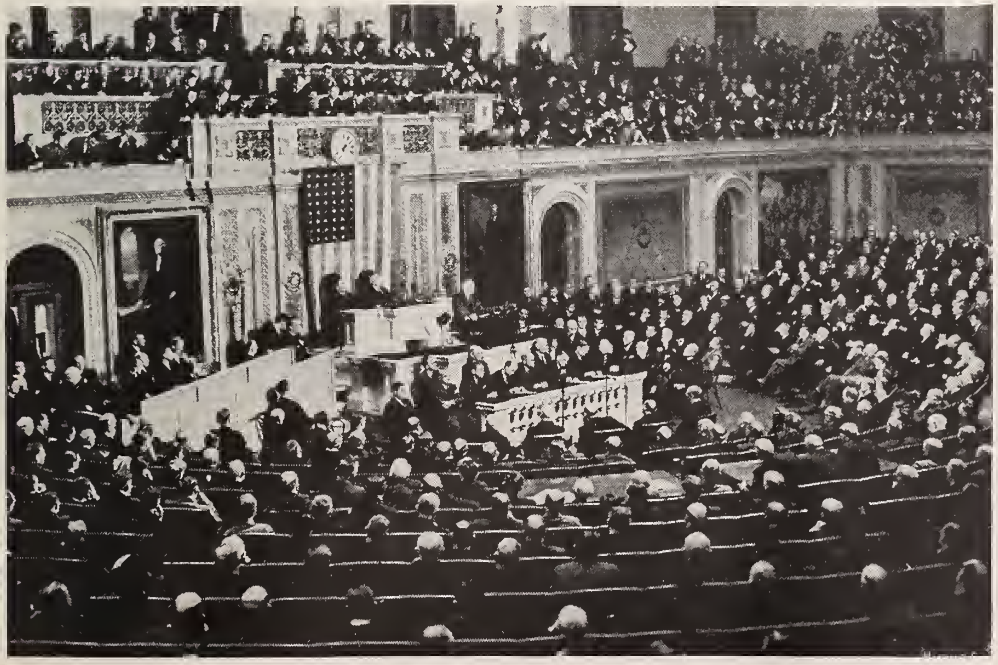
January

Report of the President's Committee on Administrative Management recommends that a Department of Welfare be created with a Secretary in the President's Cabinet. One of the proposed functions for this Department is "to protect the consumer."

February

First conclusions of the Consumer Purchases Survey of 1935–36 are released by the Bureau of Labor Statistics and the Bureau of Home Economics. Initial findings of this gigantic study of over 300,000 American consumers reveal facts about income and rent of typical families residing on and off America's Main Street. Communities of all sizes in representative sections of the country were covered in the survey. Complete findings will give the most comprehensive array of facts about the spending habits of America's consumers ever gathered together. Consumers' Guide will analyze for its readers reports on this survey.

> "I see one-third of a nation ill-housed, ill-clad, ill-nourished. It is not in despair that I paint you that picture. I paint it for you in hope—because the nation, seeing and understanding the injustice in it, proposes to paint it out. We are determined to make every American citizen the subject of his country's interest and concern; and we will never regard any faithful law-abiding group within our borders as superfluous. The test of our progress is not whether we add more to the abundance of those who have much; it is whether we provide enough for those who have too little."
>
> *President Franklin D. Roosevelt*
> Second Inaugural Address, January 20, 1937



February 24.—A Bureau of Cooperative Medicine, under sponsorship of the Cooperative League of the U. S. A., is established.

March

March 2.—Federal Trade Commission submits to Congress its report on the investigation it had been directed to make of agricultural income, including "the distribution of the consumer's dollar" between farmer, processor and distributor, and "the extent of control and monopoly in the handling or processing of the principal farm products." Consumers' Guide translates these findings into popular form with a series of articles, starting in the May 17 issue.

March 9.—S. 5, a bill amending the Food and Drugs Act of 1906, passes the Senate.

March 10.—North Dakota passes a law requiring high schools to offer an elective course for students in "cooperative marketing and consumers' cooperatives."

March 11.—Report of the President's Inquiry on Cooperative Enterprise in Europe is released. Specific recommendations propose:

"That a survey be made of consumer and service cooperatives in this country;

During 1937 the Rural Electrification Administration loaned 33 million dollars to rural electric co-ops, and organizations of a cooperative nature (mutual societies, public power districts, non-profit corporations), in 39 States of the Union. By the end of the year, these cooperative societies had 43,000 miles of line either built or in process of building. When completed, these will serve 130,000 farm families who will receive electric light and electric power on their farms for the first time. Fifty thousand are already getting electric service on cooperatively owned and operated lines. Loans for wiring farm homes, barns, chicken coops, etc., were made during 1937 by REA to 70 cooperative organizations. These loans total for the year just under one million dollars.

"That a Government agency be established to give information and advice to consumers' cooperatives;

"That 'steps be taken to assure consumer cooperatives credit parity'."

March 24.—First draft of a "model law" for State incorporation of consumer cooperative associations is approved by a committee of experts called together by Secretary of Labor Perkins.

March 29.—S. 1077, an act to give Federal Trade Commission jurisdiction, and among other things, to prohibit "unfair and deceptive acts and practices" as well as unfair methods of competition, passes the Senate.

April

April 26.—Bituminous Coal Act of 1937 recreating the National Bituminous Coal Commission goes into effect. This Commission has jurisdiction over price schedules for bituminous coal delivered to household and industrial consumers in all sections of the country. Re-created also is the office of Consumers' Counsel of the Bituminous Coal Commission, sole agency established by Congress with the name "consumer" in its title, and with the single duty to represent consumer interests before officials charged with the control of prices of a consumer product. Appointed by the President with the advice and consent of the Senate, this Consumers' Counsel reports the results of his activities directly to the Congress.

April 26.—The Supreme Court of the United States upholds the validity of the Maine Cosmetic law which authorizes the State's Department of Health and Welfare "to regulate or to refuse the issuance of certificates of registration or to prohibit the sale of cosmetic preparations which in its judgment contain injurious substances in such amounts as to be poisonous, injurious or detrimental to the person." "Delegation of the power to exercise that judgment," says the Supreme Court, "is not obnoxious to the Constitution of Maine. . . And obviously, it contravenes no provision of the Federal Constitution."

April 26.—The Supreme Court of the United States in the case, the National Fertilizer Association vs. Bradley, upholds the "Open Formula" Amendment to the South Carolina statutes which requires the disclosing of certain facts on a tag or label. The decision of the Court reiterated the decision handed down in the case, Corn Products Refining Co. vs. Eddy (249 U. S. 427, 431) which stated, "The right of a manufacturer to maintain secrecy as to his compounds and processes must be held subject to the right of the State, in the exercise of its police power and in promotion of fair dealing, to require that the nature of the product be fairly set forth."

April 28.—H. R. 6749—to provide for the incorporation of consumers' cooperatives in the District of Columbia, following the general principles of the "model law" for States drafted in March—is introduced and referred to the House Committee on the District of Columbia.

May

May 4.—Organization of a Consumers' National Federation, made up of consumer groups "not operated for profit . . . nor connected with profit-making organizations," and with headquarters in New York City, is announced to: Exchange and disseminate information on consumer programs and plans of action; conduct general educational service; promote common understanding among consumer groups; establish criteria by which bona fide consumer organizations may be identified.

June

A Consumer-Retailer Relations Platform is adopted by the National Retail Dry Goods Association which provides, among other things, for:

"Development of a plan for completely truthful and adequate factual merchandise information in advertising, labeling, store signs, sales promotion, selling talks, etc.

"Cooperation with manufacturers, retailers, and consumer representatives in developing standard terminology for retailer and buying public.

"Cooperation with manufacturer and consumer interests in development of standards of performance, durability, measurement, composition and fiber identification."

A Consumer-Retailer Relations Council is set up to coordinate efforts in behalf of the consumer. It is provided that this Council, which proposes to be financed "by voluntary consumer and retailer contributions" . . . "is at all times to be consumer-dominated."

June 14.—"Hot Oil" law extension to June 30, 1939, is approved by the President. This law aims to make effective State quotas on oil production, by prohibiting interstate shipment of "hot oil" (petroleum products produced in violation of State laws).

June 30.—Division of Self-Help Cooperatives of the W. P. A. is terminated.

July

July 22.—Minnesota's State Legislature appropriates $5,000 to be used (1) to provide training and instruction in consumers' cooperation in elementary and secondary schools of the State, and (2) to prepare suitable educational material.

August

Greater Detroit Renters and Consumers League is organized with some 12 affiliated groups and 15,000 individual members, and plans are laid to organize 22 neighborhood branches throughout the city.

August 1.—A Consumers' Division is created in Minnesota's State Department of Agriculture to investigate prices of commodities "essential to living" and to publish reports "so as to disclose the cost of production, the cost of distribution and the profits of each manufacturer, producer, dealer, wholesaler or retailer, of such necessities" and to publish prices deemed "to be fair retail prices in any given locality, in order that the public may know whether or not excessive profits are being exacted by any person, firm, association or corporation."

August 12.—A law requiring that potatoes be sold by United States grades in the District of Columbia is approved by the President.

August 17.—Miller-Tydings "Price Maintenance Act," attached as a rider to the appropriation bill for the District of Columbia is approved by the President. This law amends the Anti-Trust Act so as to legalize, in interstate commerce, resale price maintenance contracts entered into under State laws. On signing this tax bill President Roosevelt says of the rider: "I have decided to sign the bill in the hope that it will not be as harmful as most people predict, and I call attention to the fact that one of the principal objections to the rider is that the Departments opposing it believe it will seriously raise the cost of many articles to the consuming public. . ." (Forty-two States now have resale price maintenance laws.)

September

Formation of the Institute of Consumer Economics at Stephens College, Columbia, Missouri, first educational institution to organize a separate consumer department.

September 1.—United States Housing Act (generally called the Wagner-Steagall Act) is approved. United States Housing Authority is set up, with an appropriation of $26,000,000 over a total of 10 years and power to issue $500,000,000 in bonds, to assist local public housing agencies in housing low-income families now living under slum conditions.

September 2.—Sugar Act of 1937, extending the principles of sugar control of the Jones-Costigan Act of 1934 and setting new quotas on both raw and refined sugar produced in continental United States, insular possessions, and Cuba, is approved by the President. In signing the bill, the President declares: "I am approving the bill with what amounts to a gentleman's agreement that the unholy alliance between the cane and beet growers on the one hand, and the seaboard refining monopoly on the other, has been terminated by the growers. . .

"Future legislation," says the President's statement, would "see to it that the American housewife is protected adequately."

September 6–9.—American delegates attending the International Cooperative Alliance's 15th Triennial Congress, propose formation of an international cooperative petroleum wholesale, for processing and shipping of oil from American to European co-ops.

October

A strike by 5,000 kosher meat dealers in New York City against prices and as a protest against the substitution of inferior for better grades of meat brings as one result the drafting of an ordinance for the compulsory grading of all meat sold in New York City.

October 1.—Group Health Association, composed of employees of Home Owners' Loan Corporation in Washington, D. C., opens a clinic to provide medical care and hospitalization on a group purchase, fixed-fee, pre-payment plan.

October 4.—American Federation of Labor in convention unanimously adopts the report of its Executive Council stating, "We heartily endorse Rochdale consumers' cooperation in principle. . . Our incomes must be protected both when we earn them and when we spend them if we are to make the greatest possible progress in raising living standards. Without this two-fold protection there is dangerous opportunity in any society for one group to discriminate against another."

October 11.—Cooperative League Institute, first national training school for the American consumer cooperative movement, opens a 4-month course in New York.

October 26.—"In the interest of fair competition and consumer protection," the Federal Trade Commission, after conferences with the industry, issues "Trade Practice Rules" for the rayon industry, defining "rayon" and requiring that materials made of rayon shall be "clearly and unequivocally" invoiced, labeled, and advertised as such. Provisions of these Rules make a big start toward better buying guides for textiles.

November

First steps are taken in New York toward the formation of a cooperative organization for the purchase and distribution of milk directly between the producer and the consumer. New York's State Commissioner of Agriculture and Markets announces his willingness to license such an organization "in the public interest." A consumers' cooperative will deal directly with a producers' cooperative.

November 7.—Chicago's United Conference against the High Cost of Living, endorsed by 150 organizations (including unions, churches, settlement houses, neighborhood clubs, etc.) meets to consider consumer action on food and housing costs, and allied problems.

November 8.—The Supreme Court of the United States renders a decision in favor of the Federal Trade Commission in its case against the Standard Education Society, et al. Said the Court:

"There is no duty resting upon a citizen to suspect the honesty of those with whom he transacts business. Laws are made to protect the trusting as well as the suspicious."

November 26.—Secretary Wallace. reporting to the Congress on elixir of sulfanilamide deaths, states that during September and October of 1937 at least 73 persons died "as a

How Will Your City

1. Does your city have a market news broadcast that tells household buyers what are the best buys each morning, like the one furnished by the Consumers' Service Division of New York City's Department of Markets?

2. Does your city's Weights and Measures department have an effective education program in the public schools to acquaint young consumers with the importance of being watchful when they buy, as does the City of Detroit Department of Weights and Measures in cooperation with the Detroit Board of Education?

3. Does your Weights and Measures department have an aggressive enforcement policy, as does the New York City Department of Markets? Says the *New York Times:* "Chiseling the New York City consumer is not so easy as it used to be. . . Now tradesmen 'gypers' are apprehended at the rate of 1,000 per month by inspectors of the Department. . ."

4. Does your city have an effectively operating plan for compulsory grading of meat, as does Seattle, Washington?

5. Has your city adopted the Standard Milk Ordinance for the protection of consumers, as have 774 other cities? Write to the U. S. Public Health Service, Washington, D. C., for facts about this Ordinance.

6. Do your public schools carry on programs of adult consumer education, as do the Los Angeles public schools? Three different courses on consumer problems have been organized for adults and a 3-hour session is held once a week in 30 different school buildings scattered throughout the city.

direct result" of taking this drug, and that "20 other persons who took the elixir died but it has not yet been established that this drug was exclusively responsible.

"Before the 'elixir' was put on the market," Secretary Wallace reveals, "it was tested for flavor but not for its effect on human life. The existing Food and Drugs Act does not require that new drugs be tested before they are placed on sale. . . Since the Federal Food and Drugs Act contains no provision against dangerous drugs, seizures had to be based on a charge that the word 'elixir' implies an alcoholic solution, whereas this product was a diethylene glycol solution. Had the product been called a 'solution,' rather than an 'elixir,' no charge of violating the law could have been brought. . . Most drug manufacturers recognize a responsibility to the public far greater than that imposed by existing law. Some are known to have considered making a solution of sulfanilamide in diethylene glycol before the 'elixir' was put on the market, but abandoned the idea on investigating the toxicity of the solvent. But the attitude of some drug makers is exemplified in (the manufacturer's) statement carried by the press on October 23: 'My chemists and I deeply regret the fatal results but there was no error in the manufacture of the product. . . I do not feel that there was any responsibility on our part. . .'

"That a few simple tests on experimental animals would have demonstrated the lethal properties of the elixir is evident from the work reported by the American Medical Association. . .

"While the 'elixir' incident has been spectacular and has received much publicity, aside from the brevity of the period in which the killings occurred, it is but a repetition of what has frequently happened in the past in the marketing of such dangerous drugs as dinitrophenol, cinchorphen, and other toxic substances.

"It is worthy of note that, shocking as these instances have been, the actual toll in deaths and permanent injury from potent drugs is probably far less than that resulting from

and State Rate by 1939?

7. Are there organizations in your community which are providing an open forum for the discussion of consumer problems, as did the New Jersey College of Agriculture, New Jersey Milk Control Board, and the New Jersey Department of Agriculture in their "Consumers' Food Institute," held at Rutgers University, October 21, 1937?

8. Does your State have a Consumers' Division or similar office in its government to furnish information and make investigations on behalf of consumers, as do the States of Minnesota, New Jersey, and Michigan?

9. Does your State have a law which allows consumers to incorporate and operate under the cooperative principles of the Rochdale weavers? A tentative draft of a model State cooperative law, prepared by a committee of experts called together by the Secretary of Labor, can be secured from the Consumers' Project, U. S. Department of Labor, Washington, D. C.

10. Does your State have a law and an office that adequately backs up the work of local Departments of Weights and Measures, and covers territory not covered by such local agencies?

11. Does your State have a Food and Drugs law which adequately protects you in the case of products manufactured and sold within your State?

12. Does your State have a law to keep dangerous cosmetics from the market, as does the State of Maine? Of 5,000 cosmetics presented for registration, the great majority were accepted for registration, but 136 were banned, 23 were forced to change their formulas, and 72 were required to attach precautionary labels.

13. Does your State Department of Education have a program for aiding schools to work out programs of consumer education, as does the California State Department? This Department has issued an annotated 418-page bibliography on consumer education.

14. Does your State have a central clearing house of consumer educational and protective activities, as does Massachusetts through its Consumer Institutes?

Will your consumer programs for 1938 provide the answers to these questions?

harmless nostrums offered for serious disease conditions. In these cases the harmful effect is an indirect one. Sick people rely on false curative claims made for worthless concoctions, and thus permit their disease to progress unchecked. It may be too late when they lose confidence in the nostrum and seek rational treatment. . .

"In the interest of safety, society has required that physicians be licensed to practice the healing art. Pharmacists are licensed to compound and dispense drugs. Electricians, plumbers, and steam engineers pursue their respective trade under license. But there is no such control to prevent incompetent drug manufacturers from marketing any kind of lethal potion. . ."

Four recommendations for legislative action to protect the public follow in Secretary Wallace's report: "(1) License control of new drugs to insure that they will not be generally distributed until experimental and clinical tests have shown them to be safe for use. . . (2) Prohibition of drugs which are dangerous to health when administered in accordance with the manufacturer's directions for use. . . (3) Requirement that drug labels bear appropriate directions for use and warnings against probable misuse. . . (4) Prohibition of secret remedies by requiring that labels disclose fully the composition of drugs. . ."

We anticipate objections which some alert readers may be prompted to make that our list of events, local and national, does not include all consumer-newsworthy occurrences of the year: (1) by apologizing for its possible incompleteness, due to the difficulty of keeping abreast with developments on a rapidly widening front, (2) by inviting readers to propose additions to this list. We shall be glad to publish in later issues any memory-joggings we receive.

November 28.—A Consumers' Council of Baltimore is formed with membership of unions, local organizations and individuals to "promote and carry on a program of action designed to protect the consumer by combating high living costs; to provide informational and educational service on consumers' problems; to coordinate the activity of community organizations whose program involves in whole or in part activity on behalf of the consumer."

December

December 1.—S. 3073 is introduced in the Senate, calling for certification (not licensing) of new drugs "not generally recognized as safe. . ."

December 6.—Amendments to the Federal Credit Union Act are approved by the President. One amendment provides for more liberal examination fees for federal credit unions, to aid smaller credit unions. A second allows federal credit unions to make loans to each other. A third insures more equitable taxation for federal credit unions making them subject only to property taxes. A fourth amendment authorizes the Farm Credit Administration to investigate and report on "the problems of persons of small means in obtaining credit at reasonable rates of interest and . . . the methods and benefits of cooperative saving and lending. . ."

December 8.—Michigan's Governor creates an office of Consumers' Counsel in the State's Department of Agriculture and lays plans for its functioning at the start of 1938.

December 11–12.—"The People vs. H. C. L." went on public trial before a two-day conference called by the Consumers' National Federation and attended by delegates from 52 trade unions; 31 neighborhood and 21 civic organizations; 25 consumer and cooperative groups; 11 religious bodies; 77 negro and 6 miscellaneous national organizations and some 60 other organized groups.

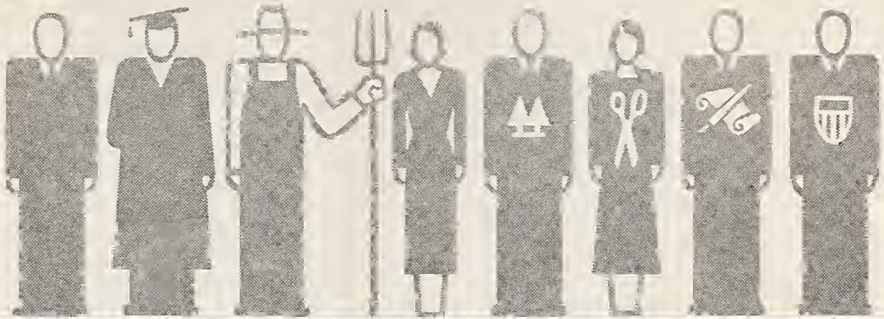
THROUGHOUT THE YEAR

Every week—a consumer program, broadcast by the Consumers' Counsel Division, A. A. A., in cooperation with the General Federation of Women's Clubs, via NBC's Red Network. Listen in on Tuesdays at 2:30 P. M., Eastern Standard Time, for facts that will help you in your household buying problems.

Check-up in our library shows consumer problems and consumer activities are bigger attention-getters than ever. More than 125 important articles appeared during the year in weekly and monthly periodicals, both popular and specialized. Total in 1936 was 97.

Government graders continue to roll up a formidable record. Official figures for 1936–1937 show they inspected and stamped for quality: 493,369,314 pounds of beef, veal, lamb, mutton, pork, sausage, lard; 3,536,754 pounds of poultry and game; 2,086,160 pounds of fish. No count is made of the number of cans of fruits and vegetables which went to market bearing quality grades, but official headquarters in Washington estimate there were more in 1937 than ever before.

1937 Consumer Quotes for 1938



"Consumer organization is definitely on the increase. . . The critical next stage of consumer organization concerns the effort to afford these many groups a common service of information of a high level, and a type of coherent leadership that will change scattered and intermittent activity into a continuous, intelligent force. . . In basic intent it aims only to do for the consumer what is already commonplace good sense and routine practice in the fields of business and industry and labor."

ROBERT S. LYND, *Professor*

"Consumers' interests seem to follow three broad lines: First, an interest in the working conditions under which merchandise is produced and distributed; second, an interest in standards, specifications and accurate labeling (or other advertising); third, an interest in measures that affect price, whether arising from monopolistic privileges or from inefficiencies that increase costs.

"A consumers' movement that can protect consumers' interests along all of these lines must be intellectually and financially independent. The special interests of producers along each line are obvious, and they may be at variance with consumers' interests."

PERCY S. STRAUS, *Merchant*

"Let's get down to cases on what this right-wing Consumers' Movement can mean in our sales planning, for both manufacturers and retailers. . . Eight million women, and more, are ready to be used in every manufacturer's and retailer's sales promotion plan."

MRS. LOIS B. HUNTER, *Copywriter*

"The consumer, ultimate master of the business world, is writing a new chapter of commercial history. By weight of numbers and by the rising crescendo of demands the pattern of merchandising is effectively being changed. The business world listens and takes heed when the nation's strongest consumer organizations say 'We want more facts about your merchandise in order that we may buy more wisely.' They are saying in a language that cannot be misunderstood that in addition to fashion they want information about the grade and about the use and care of the things which they buy. This movement is no passing fad because it has been slow in maturing and, having learned to walk is now ready to run. In the last six months it has become a dominant note in consumer relations."

Editorial, trade journal

"Labels should explain price differences. Consumers have learned that a higher price does not necessarily mean higher quality or that the merchandise will do a specific job any better. When 3 or 4 articles that look exactly alike are priced differently, the consumer asks 'why?' Are there 'hidden' values in the higher priced one? If so, what are they? The label should answer, not in glowing generalities, but in definite facts about construction or performance."

RUTH O'BRIEN, *Chief,* Division of Textiles and Clothing, Bureau of Home Economics

"Standardization will develop as fast and as far as the groups concerned want it to, and as it can prove its usefulness in effecting economies. . . A few years ago retailers and manufacturers were asking each other, 'Does the consumer really want standards?' That question has been answered. . . The need for standards has been established. There still remains the long term pull of getting these standards developed. The path ahead is a steep and hard one."

P. G. AGNEW, *Secretary,*
American Standards Association

"The bewildered consumer, who wants to know 'how warm it is,' is it preshrunk, fast color, water repellent, etc.; further confused by the conflicting claims and promises and ambiguities of high pressure, competing sales campaigns, has been sorely in need of sane, intelligent guidance. . . Business has suddenly discovered that organized consumers not only are beginning to know what they want, but that they have—or soon will have—the power to get what they want."

H. W. Brightman, *Chairman,* merchandising division, National Retail Dry Goods Association

"The question 'What does the consumer expect in fiber identification?' might well be answered in this phrase: 'The right to choose what she is buying.' . . . Fiber identification is the beginning, not the final step, toward the wise buying of textile fabrics."

Julia K. Jaffray, New York City Federation of Women's Clubs

"The fact that a false statement may be obviously false to those who are trained and experienced does not change its character, nor take away its power to deceive others less experienced. There is no duty resting upon a citizen to suspect the honesty of those with whom he transacts business. Laws are made to protect the trusting as well as the suspicious. The best element of business has long since decided that honesty should govern competitive enterprises, and that the rule of *caveat emptor* should not be relied upon to reward fraud and deception."

The Supreme Court of the United States in Federal Trade Commission vs. Standard Education Society

"Lucid simplicity of method, as opposed to technical obscurity, promises to reinvigorate the movement toward informative labeling of sheets, towels, blankets, and related lines of dry goods. . . Such an approach, judging by the developments of recent months, is now slowly emerging, although regretably enough, it comes from the consumer rather than the manufacturing side of the issue. . .

"The departure from past methods would be in the manner of presenting the facts. Technical terms would be translated into language understandable to the layman. Instead of leaving the translation to the enthusiastic but scientifically unskilled pen of the writer of blurbs, the rendering of laboratory data into simple words would become a matter of standardization under the direction of a nationally recognized technical association or government agency."

Wil Greene, *Editor*

"The purchase of canned foods is still a game of chance played with loaded dice. Read 'em and weep! There is no Federal law requiring simple, intelligible labeling of quality grades to steer Momma through the labyrinth of labels made lovely by pretty pictures and misleading adjectives."

William West, *Writer*

"This same law (passed in 1937 by the Washington State legislature) requires each baker to file prices of all his products. . . It is illegal and punishable by removal of license for any baker to sell his products at any price less than his 'filed' prices. . . 'Believe it or not,' dear readers, but this little price-filing clause, under threat of license removal, is actually creating price uniformity. . ."

Wallace Macpherson, Federal Bakery, Tacoma, Washington

"A free competitive system can only work if every unit continually adjusts itself to changing conditions, and that means reduction of prices when it is necessary. . . The trouble with our system is that it is half-free and half-monopolistic, half-flexible and half-rigid."

Leon Henderson, *economic advisor,* Works Progress Administration

"The way to control unjustifiable price advances is by increasing production. This can be done so long as there are unused natural resources and an abundance of money at reasonable rates."

Marriner S. Eccles, *Chairman,* Federal Reserve Board

"Today the Government itself can not get competitive bids in basic products, the welfare of our people is dislocated by disparities between controlled and free prices, great industries in slack times hold their prices though their volume falls and their labor is idle, small business men in many lines of useful enterprise are falling like autumn leaves and the profits of commerce concentrate in fewer hands. This is a condition that I would label 'Handle with care—inflammable.' "

Robert H. Jackson, *Assistant Attorney General of the United States*

"It is to the advantage of both the agricultural producer and the urban and rural consumer to reduce the spread between producers' receipts and consumers' payments, so that the producer may get more and the consumer pay less. The only way that either producers or consumers can positively control this is by the organization of their own cooperative enterprise."

Jacob Baker, *Member,* President's Inquiry on Cooperative Enterprise in Europe

"Now look, if you will, at America—a nation that is restless and impatient of restraint; a nation that buys its shoe shines and plays slot machines; a nation where all the women discard hats and clothes when the style changes, instead of when they are worn out. . . Perhaps an American form of consumer cooperative, suited to the peculiar genius of the American people, will be developed. There are as yet no signs of such development. Until that time. . . consumer cooperatives will continue to play an extremely minor role in American business life."

Clem D. Johnston, *Director,*
Chamber of Commerce of the United States of America

"I do not believe that consumer cooperation will replace private business in the United States. Neither do I believe that private business can stop the development of consumer cooperation here. But honest competition between the two will be good for both, and for the consumer."

Clifford V. Gregory, *Member,*
President's Inquiry on Cooperative Enterprise in Europe

"To our intimate knowledge, no producer nor marketing association has in any way come near to solving the marketing problem except by some form of producer-consumer compact. Not until the producers are privileged to meet the organized consumer at the city gate may we hope to attain success in this direction. The keys of the city logically belong to the consumer dweller. We of the Farm Cooperatives desire to do our part that the consumer may speedily, yet peacefully, gain possession."

Roland N. Benjamin, *President,*
Pennsylvania Farm Bureau Federation

OUTLOOK FOR FOOD SUPPLIES in 1938

Behind the ups and downs in food prices which may occur in 1938 will be two basic facts: incomes of consumers, and supplies from producers. Agricultural experts make these predictions of food supplies for the coming year. Check them against the changes in prices you pay

MEATS

Total supplies probably will be larger, with most of the increase during the last half of 1938. The increase will be largely in pork and better grades of beef. Due to larger supplies and smaller consumer incomes, meat prices are expected to average lower than during the present year. Prospective changes in meat supply by kinds are as follows:

Lamb: Total supplies most likely will not differ from the current year, but a larger slaughter of grain-fed lambs is in prospect.

Beef and Veal: Slightly smaller supplies are expected, but slaughter will include a larger proportion of better grade or grain-fed cattle. Reduced slaughter of grain-fed cattle this fall was a major factor behind high meat prices. Largest increase over 1937 in better grade cattle slaughter most likely will come from May through October.

Hogs: A substantial increase in number of hogs slaughtered is in prospect for 1938, with most of the upturn during the last half of the year. An increase in hog weights will further tend to boost available supplies.

Poultry: Marketings are expected to be below their 1937 level during the first half of 1938 but above current supplies during the remainder of the year. Extent of the latter increase will depend upon hatchings next spring. Winter broiler production probably will be considerably above average.

Turkeys: A larger turkey crop is in prospect for the holiday season one year hence.

EGGS

Marketings probably will be much smaller due to a decrease in the size of laying flocks, and an expected lower production per hen. During the early winter of 1938, when pullets from the spring hatch commence to lay, production may advance to current levels.

DAIRY PRODUCTS

No material change in milk production is expected in 1938. During the winter feeding period which ends in May, per capita milk production most likely will be slightly larger than during the preceding feeding period and about the same as average per capita supplies for the past 10 years. During the spring and summer pasture conditions will determine changes in production from 1937.

FRUITS

Apples: Marketings during the first half of 1938 most likely will be much larger than in 1937. Supplies during the last half of the year will depend upon the size of the 1938 apple crop.

Grapefruit: Supplies during the first three-quarters of 1938 probably will be smaller than in 1937, but above any other year. Marketings during the last 3 months come from the new crop.

Oranges: Total supplies probably will be substantially bigger than in 1936–1937 due to a bumper crop, with most of the increase after April. Production of winter and spring varieties of oranges which move to market from October through May is of record size and slightly larger than a year ago. The California Valencia or summer orange crop, which is marketed from May through October, is expected to be about 50 percent larger than the season just ended. Valencia oranges comprise about one-half the crop this year.

Lemons: Slightly larger supplies than last year are in prospect, with production the second largest on record.

TREE NUTS

Nut supplies during the 1937–1938 marketing year will be substantially larger than in 1936–1937, and close to record size. Record crops of almonds, walnuts, filberts, and an above average pecan crop are expected. Largest increases over 1936–1937 are in prospect for almonds and pecans.

RICE

Supplies for 1937–1938 marketing will exceed any other year on record with most of the increase in the southern producing States. A heavy carryover at the end of the marketing year next summer is in prospect.

DRY EDIBLE BEANS

1937–1938 supply is expected to be much larger than in 1936–1937 and above average. During the past season supplies were relatively small due to drought conditions, and prices advanced sharply. Most of the increase is in great northern and lima beans, for supplies of pinto and pea beans are expected to about equal the average of recent years.

TRUCK CROPS

Production of commercial truck crops during 1938 most likely will equal or slightly exceed the record volume of the past year if yields are about average. Acreage increases are expected in lettuce, onions, and lima beans, with most other commodities holding close to their 1937 harvested acre level. The slight decrease in acreage reported for the early producing States, which ship during the winter months, probably will be offset by increases in intermediate and late producing States.

CANNED VEGETABLES

Total supplies in 1937–1938 are indicated to be the largest on record, and about 15 to 20 percent above 1936–1937. Supplies of sweet corn, lima beans, beets, snap beans, and green peas are substantially larger than in 1936–1937. Tomato supplies will show little change.

QUICK FROZEN VEGETABLES

Volume is expected to be larger than a year ago with particularly marked increases in peas and lima beans. Quick frozen vegetables, however, still represent a small part of total vegetable supplies.

SWEETPOTATOES

Supplies during the first half of 1938 come from storage holdings of the 1937 crop and are expected to exceed those of the preceding year. The 1938 crop, which is the source of supplies during the remainder of the year, probably will be larger than the 1937 crop.

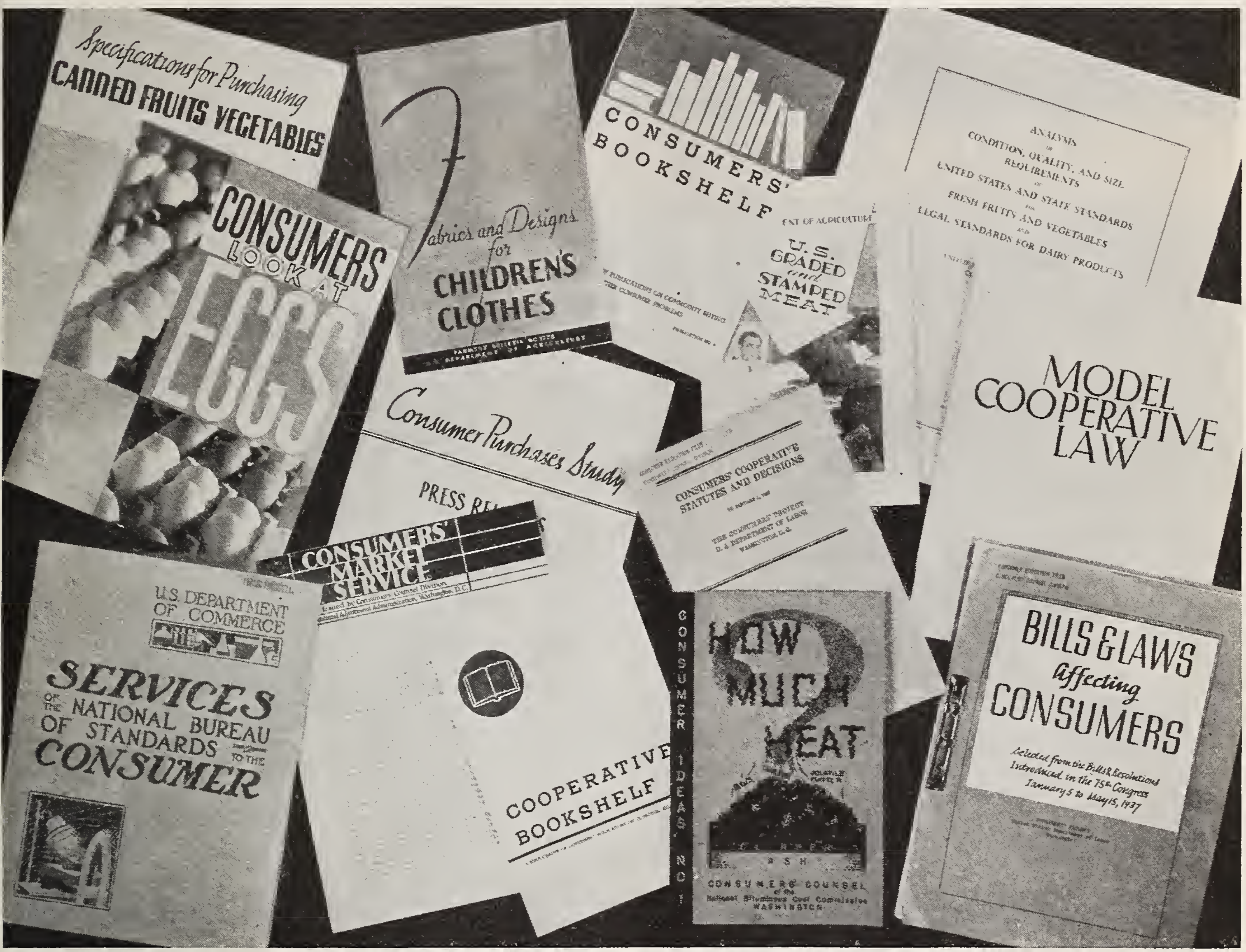
POTATOES

During the first half of 1938 supplies are primarily from storage holdings of 1937 late grown potatoes and most likely will be somewhat larger than in 1937. Marketings during the last six months will depend on the outturn of the 1938 late potato crop.

WHEAT

Marketings during 1937–1938 probably will be substantially above 1936–37. The combined winter and spring crop is over one-third larger than a year ago and wheat exports instead of imports are in prospect. While production of durum wheat, used primarily for macaroni, is three times as large as last year's short crop, it is slightly more than half of average production. Other spring wheat is slightly below average, but winter wheat is above average production.

☆☆☆ For 1938's ☆ Consumer ☆ Bookshelf ☆ ☆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CONSUMERS' COUNSEL
BILLS & LAWS Affecting CONSUMERS
Selected from the Bills & Resolutions Introduced in the 75th Congress January 5 to May 15, 1937

Significant Government publications of 1937 which should be on the shelves of public, school, club, and home libraries for people who take their buying problems seriously. If you wish any of these publications for your bookshelf, the CONSUMERS' GUIDE will be glad to tell you how to order. Address, Consumers' Counsel Division, Washington, D. C.

CONSUMERS' GUIDE

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CONSUMERS' Guide

VOLUME IV, NUMBER 21

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PAYING FOR SPACE TO LIVE

CONSUMERS' Guide

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Vol. IV, No. 21 January 17, 1938

It's a rare consumer, picking up the pieces of year-end family finances, who doesn't vow that the new year is going to bring more order and plan in family spending. It's a rarer consumer who can put that vow to work. Nobody takes a census of vow-takers; nobody can count the people who work at their resolutions. But we'll venture the guess that more of the latter live on farms than in cities. Not because thrift thrives best in the open spaces, but because a certain amount of "looking ahead" is, perforce, a necessity in farm life. Necessities, however, have a way of coming hard, too.

To make that "looking ahead" job a little easier for the families on farms, a small bulletin has just been published by the Department of Agriculture. To city consumers lucky enough to have some element of security from which to start, the pointers this bulletin gives may be useful, too.

Behind the suggestions on planning for 1938 is the careful work of the Department and its field agents in sizing up production and consumption prospects for farmers in general during the coming year.

First, line up as many facts as you can, suggests the bulletin, on the family income. How much do you estimate will be coming in during 1938? What seasons of the year (because these questions are directed mainly to farm families) do you count on having the most cash? What other sources of income, besides cash, do you have? If there is a slight decrease in income in 1938, what family interests will need to be considered in making adjustments? If the reverse should happen, what family interests would be considered in the use of it?

Next questions deal with non-money incomes. Homemakers are urged to ask themselves: Were there some serious shortages in 1937 in products which you usually count on for family use from the farm? What are you or your community doing about them? Would a different use of land help to increase the non-money income from your farm? Did you find it difficult or impossible to obtain some of the types of food which you consider necessary for your family's health? What plans can be made, in the light of the outlook for agriculture in 1938, to provide for adequate food supplies for your family? What could you do as a community to solve these food problems?

Farm families will want to ponder answers provoked by these questions: How much will it cost to produce more farm-furnished food? Is this a wise use of land and labor? How much added responsibility will this mean for the homemaker? For the other family members? Can they assume this burden?

Prices come in for scrutiny next. How do changes in the prices you have had to pay for different commodities compare with the general changes apparent for the country as a whole? What season of the year do you consider it best to buy certain products—such as apples, citrus fruits, sweetpotatoes, sheets, coal, radios? Why are prices for some commodities especially hard to predict? Why are seasonal variations in prices for some things greater than those for others?

Queries such as these lead inevitably to adjustments which must be made in family expenditures. Explorations turn naturally to local developments which it might be profitable for the family to make or refrain from making this year. To have or not to have electricity will be an immediate question for some farm families.

Have you noticed any improvement during the past year in the kind of information you have been getting which is intended to help you to become a better buyer? What agencies in your community are working toward better buying practices which would help you make your money go farther? Are you taking advantage of them?

First ingredient in individual family planning is knowing what's happening to affect the economic fortunes of all farm families. For these facts, "Farm Family Living Outlook for 1938" is a valuable guide. Copies can be had for 5 cents each from the Superintendent of Documents, Washington, D. C.

Votes on our informal poll as to whether consumers want the kind of informative labeling that is more than generalizations about the quality and construction of the goods they buy, continue to drift in. Here's one to give cooperatives pause: "Register my vote in favor of more informative labeling," writes a consumer in Minnesota. "There is entirely too much buying of goods on faith and guesswork, even among us consumer cooperators, many of whom complacently assume that high quality comes automatically with a movement that has dispensed with the so-called profit motive." One big mid-western cooperative, not so complacent, which cans fruits and vegetables for sale by local co-ops, grades all of its products according to Government standards and labels them with A, B, and C grades.

In Washington, D. C., as in many cities, such homes as these give mute evidence of the differences in living problems of small and large income families.

Paying for SPACE TO LIVE

Some facts on the cost of rent for typical families in New England cities and villages

KEEPING the wolf from the door may be a stark symbol of the struggle against poverty, but it is not so stark that it does not imply there is a door to bar. Holding on to that barricade is an expensive business; how expensive, how much of the family income is used up in keeping the "wolf" out, and how much is left for other family necessities . . . these are some of the significant consumer facts that are coming from the Consumer Purchases Study* which government bureaus, with WPA help, are now making.

Surveyors from these Bureaus went to 280,000 families throughout the country seeking information about rent payments in 1935–36. They asked these families what type of living quarters they had, and whether they rented or owned their homes. From 60,000 of these families they secured more detailed information about their housing facilities, facts on sanitary facilities, heating and lighting, type of fuel used, on whether there were accommodations for domestic help, on whether or not the families owned vacation homes, what they paid annually on mortgage obligations, and so on. Queried only were native white families with husband and wife, except in some southern cities, in New York, and in Columbus, Ohio, where native negro families also were asked for facts about their living quarters. In some of these cities foreign-born families make up an important part of the population; their housing problems did not come under the spotlight of the social surveyors.

First item of interest to consumers from this mass of data collected on housing is rent. (What quality of living quarters was bought by the rent is another question, only partly answerable by the data gatherers.) Measuring rent against family incomes gives an idea of how much of an inroad this one necessity makes on the average family purse. Comparing rents in big and little towns further spotlights the relative importance of this item in family budgets.

Here we report solely on rents and incomes in places in New England. Later issues of CONSUMERS' GUIDE will retell survey results for other areas in the country.

Glance first at the way families and incomes line up in the charts on pages 4 and 5. In every one of the 7 large and small cities, and the 14 villages, studied in New England, more than half of the white families

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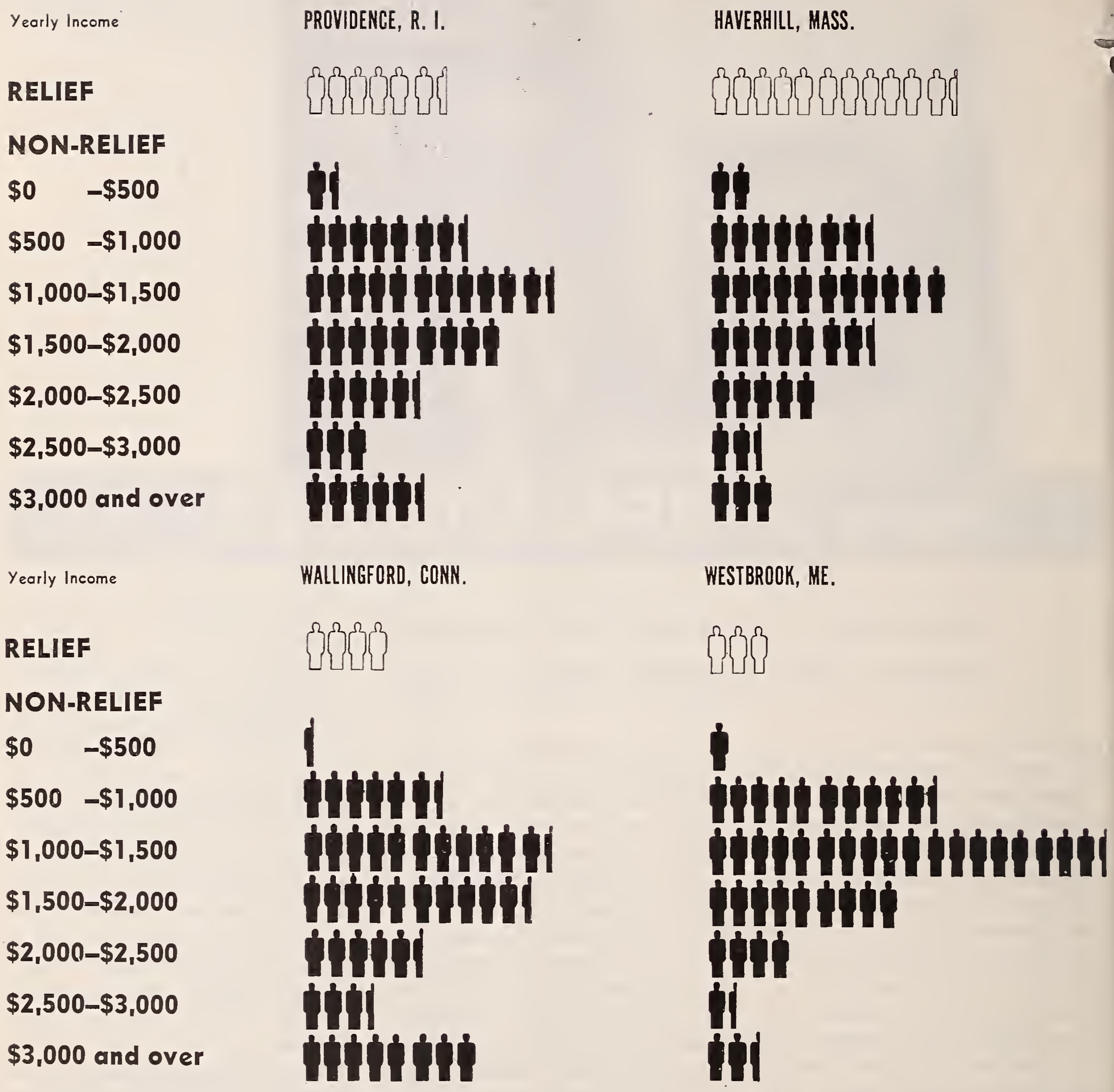
**First review of this study, jointly conducted by the Bureaus of Home Economics and Labor Statistics, as a WPA project, in cooperation with the Central Statistical Board and the National Resources Committee, appeared in the November 15, 1937, issue of CONSUMERS' GUIDE.*

Native white New England families

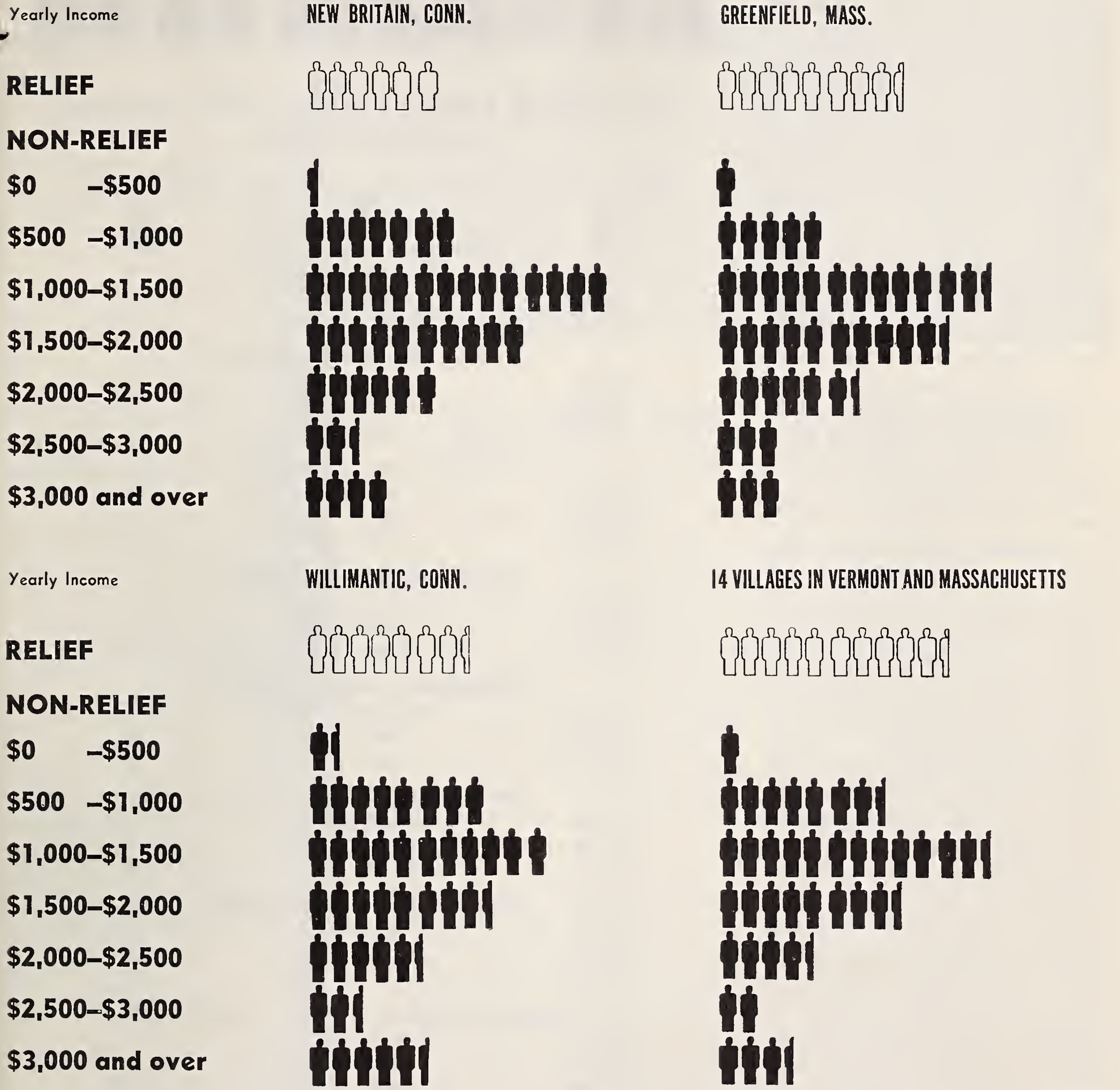


Each figure represents 2 out of every 100 families.

had incomes somewhere between $500 and $2,000 during the year 1935–36. In New Britain, Connecticut, nearly two-thirds of the families came in this group. In Westbrook, Maine, three-quarters received incomes between these bottom and top figures.

Above or below this level on the economic ladder were varying numbers of families. Sizeable groups in each locality were the families dependent at some time during the survey year on relief. In some places, relief families made up a large part of the total number of families; in others they were relatively few. Haverhill, Massachusetts, showed the largest percentage of relief families; Westbrook, Maine, the smallest. Families lucky enough to have received incomes of $2,000 or more in the 14 villages made up a smaller part of the population than the

had these incomes in 1935-1936



Each figure represents 2 out of every 100 families.

groups which either received less than $500 or were on relief.

In Wallingford, Connecticut, a third of the families were in this $2,000-and-better group, as against 10 out of every 100 who either received less than $500 or were on relief. Not even in Providence was the percentage of families in the $2,000-plus group as large as in this much smaller city. In Providence, 28 out of every 100 families could claim an income that reached this higher level; while 16 out of every 100 were either dependent on relief or receiving less than $500.

At the center of all these families in big and little places, then, stand half or more than half with incomes of from $500 to $2,000. These are the families whose expenditures for rent make the backbone of our story. We have separated this center group into three parts: First, those whose income ranged from $500 and up to, but not including $1,000; next, those between $1,000 and $1,500; third, from $1,500 and upward to, but not including, $2,000. For each income group in each locality, we show what their average monthly rent came to and how big an item rent loomed in the average family income. The table on this page lines up the harsh facts and figures.

No rule makers are the statisticians of the Bureaus of Home Economics and Labor Statistics who marshalled these facts. They venture no conclusion about the share of the family income which *should* go for rent. But if actual records of such expenditures are a guide, it takes from about one-fifth to almost a third of the family purse to purchase the right to a spot in which a New England family—with a $500 to $1,000 yearly income—can live. For those with $1,000 to $1,500 incomes, the cost represents closer to one-fifth of the family income. In the top group, $1,500 to $2,000, rent absorbs from one-eighth to one-fifth of the average income.

Even these sizeable percentages allow for relatively small monthly rental payments. Families in the lower bracket, $500 to $1,000, paid monthly rents averaging from just under $14 (in the villages) to just over $21 in Haverhill, Massachusetts. One step up, families in the $1,000 to $1,500 group spent from $17 (in Westbrook, Maine) to about $24 a month, again in Haverhill. Third-group families, with $1,500 to $2,000 incomes, found rent cost them each month amounts varying from $19 in Westbrook, to almost $28 in Haverhill.

As actual cash outlays for rent step up with larger incomes the portion of the family income which must be set aside for this item in living costs grows slightly smaller.

WHAT RENT COST FAMILIES WITH INCOMES AT THREE LEVELS

Rent Cost These Dollars Each Month	Yearly Incomes in 1935–1936	Rent Took This Percentage of Family Income Each Month
	Providence, R. I., (253,000)	
$18.40	$ 500–$1,000	28
21.90	1,000– 1,500	22
26.60	1,500– 2,000	18
	New Britain, Conn., (68,000)	
$16.20	$ 500–$1,000	23
20.40	1,000– 1,500	20
25.00	1,500– 2,000	17
	Haverhill, Mass., (49,000)	
$21.10	$ 500–$1,000	32
23.90	1,000– 1,500	23
27.80	1,500– 2,000	19
	Greenfield, Mass., (16,000)	
$18.00	$ 500–$1,000	27
22.45	1,000– 1,500	21
26.00	1,500– 2,000	18
	Willimantic, Conn., (12,000)	
$15.70	$ 500–$1,000	23
19.20	1,000– 1,500	19
23.20	1,500– 2,000	16
	Wallingford, Conn., (11,000)	
$18.00	$ 500–$1,000	27
21.40	1,000– 1,500	22
25.20	1,500– 2,000	18
	Westbrook, Maine, (11,000)	
$15.28	$ 500–$1,000	19
17.07	1,000– 1,500	17
19.00	1,500– 2,000	13
	14 Vermont and Mass. Villages, (1,000–2,500)	
$13.85	$ 500–$1,000	21
17.53	1,000– 1,500	17
22.00	1,500– 2,000	15

Village families in New England seem to have an advantage over families in big cities in the amount of cash outlay that is necessary for living quarters. Whether they get the same type of facilities is another matter on which the data do not throw light. There was about a $5 difference between rentals paid by families in the 14 Vermont and Massachusetts villages and those in Providence for each of the three income groups.

Aside from this broad difference,

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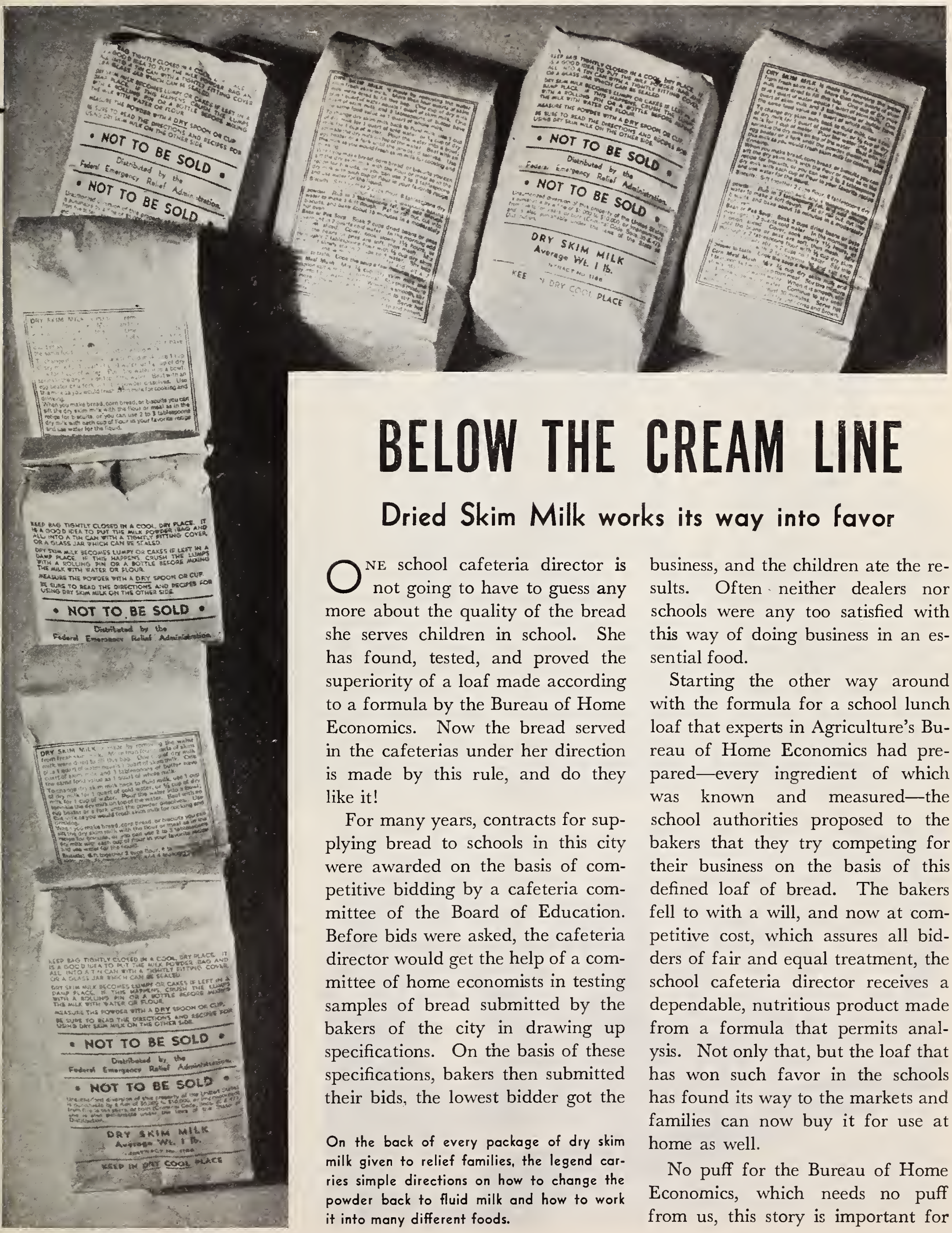
KEEP BAG TIGHTLY CLOSED IN A COOL, DRY PLACE. IT IS A GOOD IDEA TO PUT THE MILK POWDER (BAG AND ALL) INTO A TIN CAN WITH A TIGHTLY FITTING COVER, OR A GLASS JAR WHICH CAN BE SEALED.
DRY SKIM MILK BECOMES LUMPY OR CAKES IF LEFT IN A DAMP PLACE. IF THIS HAPPENS, CRUSH THE LUMPS WITH A ROLLING PIN OR A BOTTLE BEFORE MIXING THE MILK WITH WATER OR FLOUR.
MEASURE THE POWDER WITH A DRY SPOON OR CUP.
BE SURE TO READ THE DIRECTIONS AND RECIPES FOR USING DRY SKIM MILK ON THE OTHER SIDE.
• NOT TO BE SOLD •
Distributed by the
Federal Emergency Relief Administration
DRY SKIM MILK
Average Wt. 1 lb.
KEEP IN DRY COOL PLACE

BELOW THE CREAM LINE

Dried Skim Milk works its way into favor

One school cafeteria director is not going to have to guess any more about the quality of the bread she serves children in school. She has found, tested, and proved the superiority of a loaf made according to a formula by the Bureau of Home Economics. Now the bread served in the cafeterias under her direction is made by this rule, and do they like it!

For many years, contracts for supplying bread to schools in this city were awarded on the basis of competitive bidding by a cafeteria committee of the Board of Education. Before bids were asked, the cafeteria director would get the help of a committee of home economists in testing samples of bread submitted by the bakers of the city in drawing up specifications. On the basis of these specifications, bakers then submitted their bids, the lowest bidder got the business, and the children ate the results. Often neither dealers nor schools were any too satisfied with this way of doing business in an essential food.

On the back of every package of dry skim milk given to relief families, the legend carries simple directions on how to change the powder back to fluid milk and how to work it into many different foods.

Starting the other way around with the formula for a school lunch loaf that experts in Agriculture's Bureau of Home Economics had prepared—every ingredient of which was known and measured—the school authorities proposed to the bakers that they try competing for their business on the basis of this defined loaf of bread. The bakers fell to with a will, and now at competitive cost, which assures all bidders of fair and equal treatment, the school cafeteria director receives a dependable, nutritious product made from a formula that permits analysis. Not only that, but the loaf that has won such favor in the schools has found its way to the markets and families can now buy it for use at home as well.

No puff for the Bureau of Home Economics, which needs no puff from us, this story is important for the news it brings that in one city, at least, school children are getting bread 12 percent of which is milk. Starred in the list of ingredients in the Bureau's school lunch loaf formula is powdered skim milk. In every 100 pounds of raw materials, 12 of them are this important milk product.

Skim milk, as all nutritionists but too few consumers know, contains almost everything there is in whole milk except the fat. It has calcium, and phosphorus—nutrients that help in building strong bones and teeth. It is high in body-building protein. It is rich in Vitamin G which some experts believe is the best enemy of pellagra. Because it lacks the butterfat, its fuel value is not high, nor is it a good source of Vitamin A, as is whole milk. But these missing values can be got from other foods, while calcium, phosphorus, and Vitamin G come cheapest and best in milk, and are all found in skim milk.

Little skim milk, liquid or dry, ever finds its way to consumer markets. Wasted by many farmers, thrown away by many dairies, its virtues little known by consumers, the praises of this food are seldom sung, its promotion by industry languishes. Now and then, a baker or ice cream manufacturer will sell a little dry skim milk to persistent consumers, but for those whose milk budgets are small and whose nutrition needs are usually most neglected, this product is practically beyond their reach, except for the help that government has been giving.

Government for most of 3 years has been turning its hand to pushing the consumption of dry skim milk. Close to 41 million pounds have been distributed between February 1935, and November 1937. With funds from AAA, these mountains of milk have been bought and turned over to the Federal Surplus Commodities Corporation for distribution to relief agencies in 39 States, in the District of Columbia, and in Puerto Rico. There the relief agencies assign WPA workers to open the big drums in which the dry powder is shipped, and to repackage it in pound bags for delivery to households whose diets border along the danger line, and whose earners must depend on relief agencies for their income.

Drums of powder are shipped to relief agencies in the States where, as here in Texas, with the help of WPA workers, the powder is re-packaged in the glassine-lined bags that keep it fresh and dry.

Hundreds of thousands of families have learned from their Government gifts of dry skim milk how to work these below-the-cream-line values into their diet in an economical way.

Three-way benefits come from this dry milk distribution: First, to the families who receive the milk; second, to dairy farmers whose raw product is used in making the milk; third, to industry, in developing a demand which it can, if it wishes, use to advantage in making dry skim milk regularly available on markets at economical prices.

One stumbling block to the development of such a commercial business, it used to be claimed, was the difficulty of finding a package in which small quantities could be put up and kept dry. Dry skim milk must be kept dry, or else it cakes and becomes difficult to use. When this problem was put to the Bureau of Dairy Industry in the Department of Agriculture, its experts got to work and presently evolved a glassine-lined paper bag, moisture proof, and economical to produce. This is the bag which the relief agencies all over the country have used in repackaging the milk that goes into the homes of relief families.

Education in the food values of

[Concluded on page 18]

CANNED FOODS FOR DOGS

"WHAT constitutes a good dog food?" inquires a Massachusetts reader of CONSUMERS' GUIDE who reports the recent loss of a Great Dane. "Nowhere can I obtain any information on these foods. To many people, as well as to me, a dog means a great deal . . . . but I feel helpless as regards its food. This is somewhat in the nature of an appeal. Can't we take the time to investigate the foods being fed daily to man's best friend?"

Reporting on nutrition for 130 million American men, women and children, and on the best and least expensive ways to satisfy those requirements, naturally comes first with the CONSUMERS' GUIDE, as our reader agrees it should. But millions of dogs deserve one day every few years, if the letters we have received asking for information on canned dog food mean anything.

Canned dog food represents one of our newest industries. Nicholas Appert discovered how to can food for Napoleon's army back in 1810. Since our own Civil War, canning food for humans has been an increasingly important American industry. Dog food did not make its appearance in cans until a short 15 years ago; and did not acquire commercial significance till about 10 years ago.

First to put Fido's dinner into cans were packers of horse meat. Next in the business were the meat packers who found in the sale of dog food a new outlet for scraps and by-products—such as muscle scrap, blood, bones, udders, lungs, livers,

What are State and Federal governments doing to protect the quality and purity of special dog fare?

lips, pancreas, kidneys, spleens—of the animals slaughtered for human consumption. Finally, as the trade boomed, enterprising people went into the canned dog food business for its own sake.

New firms entered the business faster, perhaps, than the growing market could absorb their production. Resulting conditions were described, thus, at the time of the hearing on a proposed N. R. A. code for canned dog food, by the executive officer of the then existing trade association: "The canned dog food industry is a completely new industry which has quickly developed into a large national business. Because of its youth and amazing success, the industry has become involved in practices as to competition, labeling and advertising, which require due correction to protect the purchasing public and to assure fair competition." There was some demand at the time of the code hearing for A-B-C grading of canned dog food products. Although this demand was pressed by veterinarians and dog owners' clubs, and some producers, it got no further than did the demands for grading of canned foodstuffs for human consumption.

More recently, declared a representative of the Dog Food Division of the Institute of American Meat Packers, "It is believed by those who have made a study of this question that conditions are not improving as they should—in fact, that they are getting worse all the time—and that the only way to correct these objectionable conditions is, for those officials who are in a position to do so, to adopt and enforce regulations, including adequate standards."

Retail volume of the industry is now variously estimated at anywhere from 24 to 100 million dollars a year. Sales are chiefly through regular grocery channels. So young is the industry that the otherwise comprehensive U. S. Census of Manufactures does not separate canned dog food from other forms of commercial dog food; and does not completely distinguish the volume in dog food from meat packers' other figures. Exact size of the industry is therefore impossible to determine.

No Federal government agency is empowered to set standards of adequacy or purity for dog food.

The total number of potential ultimate consumers is about 13 million dogs. Among these potential consumers however, are some seldom found to be actual consumers, such as working dogs, those used for sheep herding or rounding up cattle, for hunting, for police purposes, or those who play in a new and dramatic role as "seeing eyes" for the blind. These and country dogs live chiefly on raw meat, also cooked meat and table scraps. City pets are usually the consumers of canned dog food. It is the growth of dog ownership in the cities which has made possible this growing industry.

Nutrition requirements of the canine family have been the subject of considerable scientific research and writing in recent years. No Federal Government agency, however, is empowered to set standards of adequacy or purity for dog food. Scientists agree, as *Veterinary Medicine* says, that "the amount of food, the ingredients of the ration, and the hour of feeding must conform to the age, size, and purpose of the dog," and that "dogs like variety in food." The dog is naturally carnivorous, and even in the city, say the experts, Fido's diet should be based on meat. "Nutritive value must be shown by biological test," says *Veterinary Medicine.* "There is now nearly universal agreement that biological value is the only standard by which the adequacy of a dog food may be judged." *Veterinary Medicine* accordingly has set biological tests over at least three generations of dogs — recording growth, reproduction, lactation—as its standard for the acceptance of claims of advertisers in its columns.

Such tests may be less essential if a prepared food is to be used as a supplement to the animal's diet of meat and meat by-products. But, as the executive of a dog food manufacturers' trade association points out, "From what we can learn, these canned products are not usually considered by the owners of dogs and cats as supplementary foods, but are looked upon as being complete in themselves and sufficient to meet all needs. . ." A "balanced" or "complete" food—it is claimed—is as hard to prescribe for all dogs, large or small, active or inactive, young or old, as a "balanced" food for the purposes of all human consumers.

Varying quantities of meat, frequently no *meat,* as meat is defined by BAI, have gone into the canned dog food put up by the packers. Meat packing plants fall into two classes, known respectively as "inspected" and "uninspected." Inspected plants are those in which, under the provisions of the Federal Meat Inspection Act of 1906, the Bureau of Animal Industry of the U. S. Department of Agriculture maintains an inspection service to safeguard the purity of meat for human consumption. While the Meat Inspection Act is concerned specifically with human food, until Sept. 15, 1936, inspectors gave canned dog food the same service that human food received. Firms whose plants were thus inspected were able, therefore, to label their cans "U. S. Inspected and Passed," with the inspection number of the establishment. They also generally used on their labels the phrase "Fit for human consumption" or some equivalent. The fact that a dog food had been inspected and passed for safety did not, of course, imply anything with respect to its adequacy or inadequacy as a diet for pets.

A little over a year ago, the Bureau of Animal Industry withdrew from the inspection of canned dog food but did not withdraw supervision of sanitation or inspection of the meat or meat by-products utilized in the preparation of dog foods, in those parts of inspected establishments devoted to dog food production. Inspected plants now sometimes place upon cans of dog food the following statement: "The meat or meat by-product ingredient of this article has been examined and passed under federal supervision. This article has been prepared in an establishment operating under federal meat inspection." The slogan, "Fit for human consumption," is no longer used. The B. A. I. no longer takes any responsibility for the finished product.

About two-thirds of the business of canning dog food, it is estimated by a veterinarians' publication, is done in plants without Federal meat inspection. Some "uninspected plants" purchase meat by-products from the inspected packers; others do their own slaughtering, or acquire animal carcasses in various ways. A small number of manufacturers use fish and fish by-products as the chief ingredient for canned dog food. Methods and sanitary conditions within the uninspected plants vary. Contents of canned dog foods, too, vary greatly. The State of North Dakota has set minimum standards for products sold within its borders. These standards prescribe that half of the weight of the can shall be "fresh, sound meat or fish;" that a minimum of 10 percent shall be protein, a minimum of 2 percent shall be fat, and a maximum of 1 percent crude fiber. Of the protein content, 75 percent (or 7½ percent of the can's total contents) must be protein of animal or fish origin.

California has similar requirements. In ruling on adulteration of canned dog food, this State's Department of Public Health made this definition: ". . . authorities will hereafter regard as adulterated, within the meaning of the California

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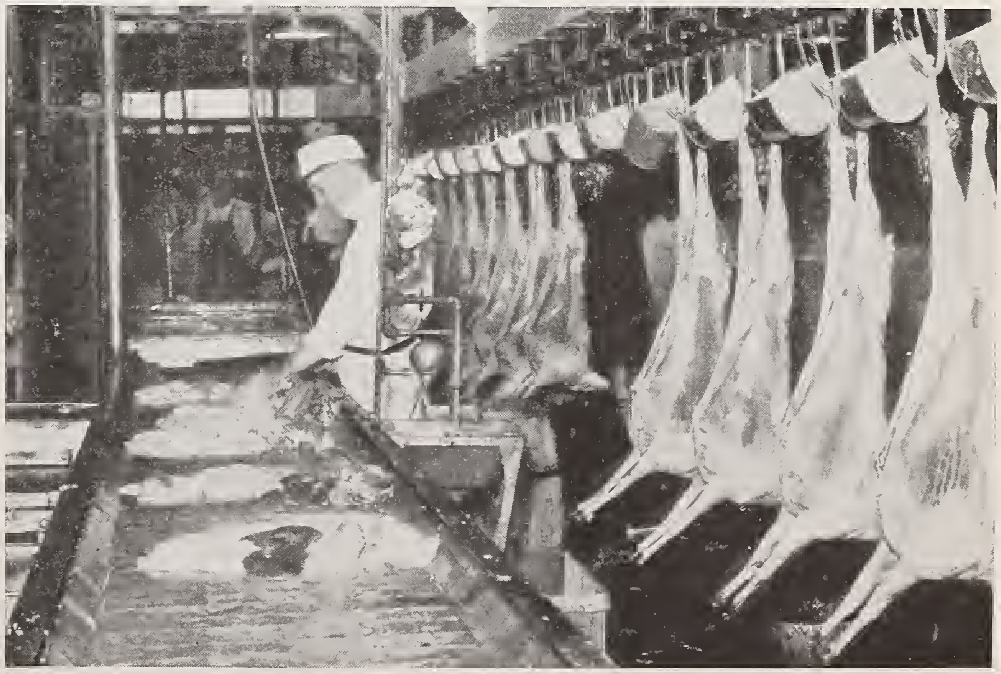
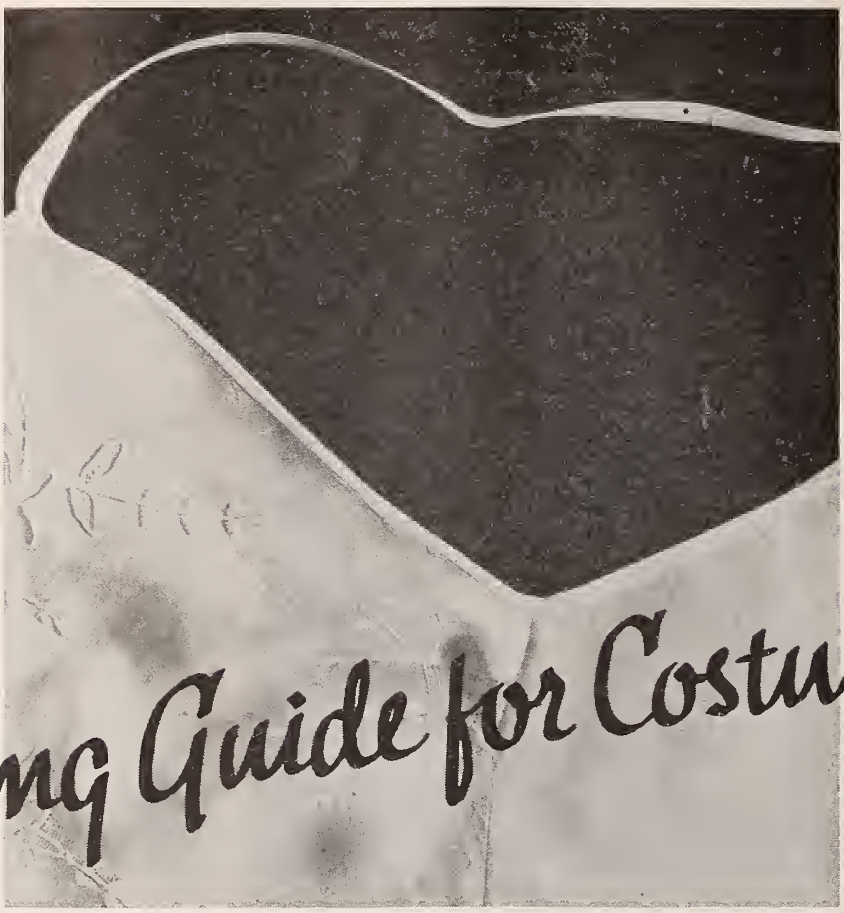
Government inspectors do not pass upon finished dog food products, though meat and meat by-products, which may be used in canned dog foods later, pass under their scrutiny in establishments doing interstate commerce.



Buying Guide for Costume Slips



Points to watch in making wise and economical purchases of this important clothing item

There are no hard and fast rules for the purchaser to follow in buying slips, that essential part of every woman's annual clothing budget. But there are certain guides that can help in getting the qualities desired, and the Bureau of Home Economics has lined them up.

Trying on a slip is one of the most important things to do. This will assure accuracy of cut and fit. You will want to ask: Is it smooth fitting and will it allow sitting room without strain? Are there wrinkles and bulges about the waistline? Does it fit neatly over the bust and under the arms? What about the length? Does it hang evenly?

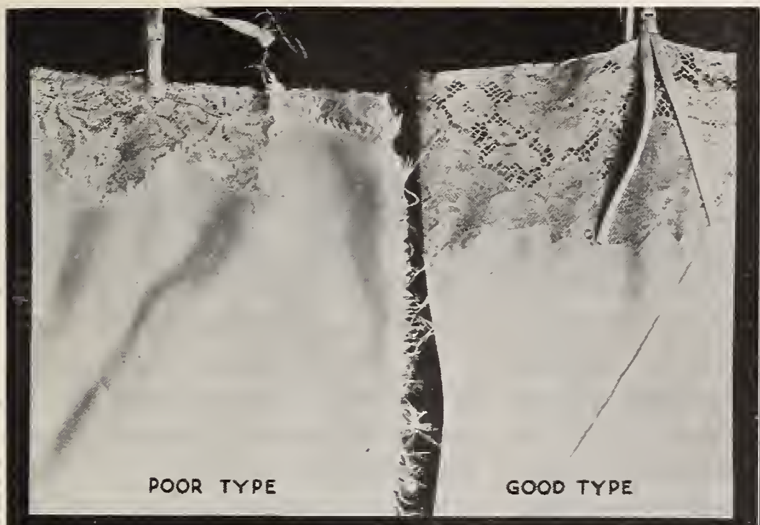
"It has adjustable straps," the sales person may assure you when you question length. But adjustable straps cannot be pulled up too far without destroying the fit. Once they are adjusted they can hardly be jerked up and down without spoiling the lines unless the slip is cut perfectly straight in the first place.

When selecting a costume slip, you should keep in mind the purpose for which it is to be worn. For example, a slip for wear under a tailored street dress should be extremely simple in cut and of sturdy practical material, while one to be worn with a transparent afternoon or evening frock needs lines and material in harmony with those of the dress.

Fabrics, then, should be considered with respect to types and quality. They may be made of silk or synthetics — French crepe, satin, crepe de chine, and taffeta; in linen—handkerchief linen; and in cotton—nainsook and broadcloth.

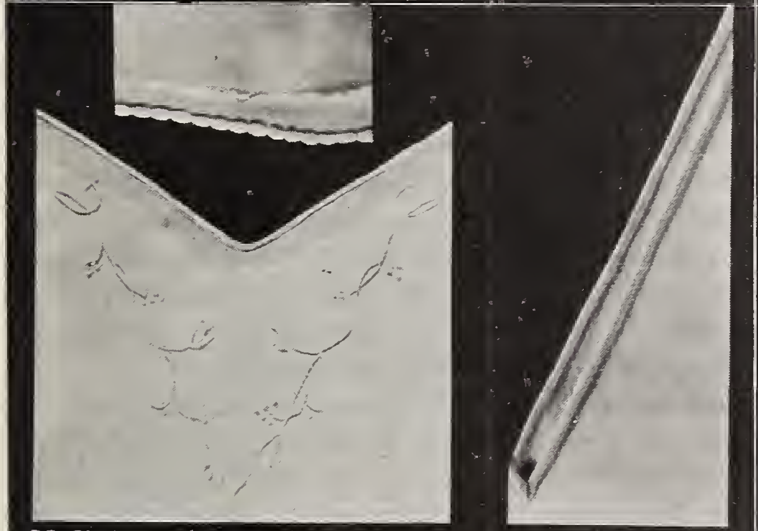
Look under this surface "niceness" and see if the slip is firm and evenly woven rather than loose, filled with sizing, or pressed hard to spread the yarns to give a lustrous finish. Pull the fabric slightly between the thumb and finger to see if the yarns shift easily. If the weave is not properly balanced, the warp yarns may slide first this way and then that after a little wear. Then the fabric takes on a blistered appearance which spoils the shape of the slip and eventually breaks through. This is very common, especially with French crepes. Price is no safeguard. In higher priced slips the yarns may shift as badly as in lower priced ones.

Insist on definite information, preferably printed on a manufacturer's slip or tag, about the weighting and loading of silks and synthetics. In accordance with a trade agreement drawn up under the auspices of the Federal Trade Commission "pure dye" means that the silk

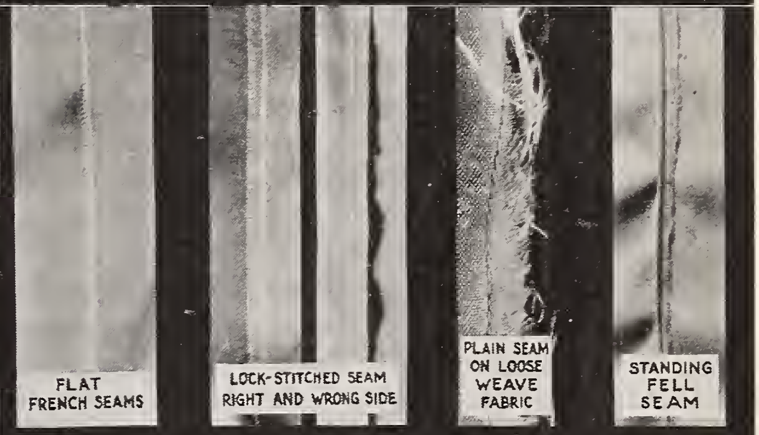


Are the straps attached so they will not tear holes in the slip?

If yarns "shift" easily, the fabric will blister and wear out quickly.



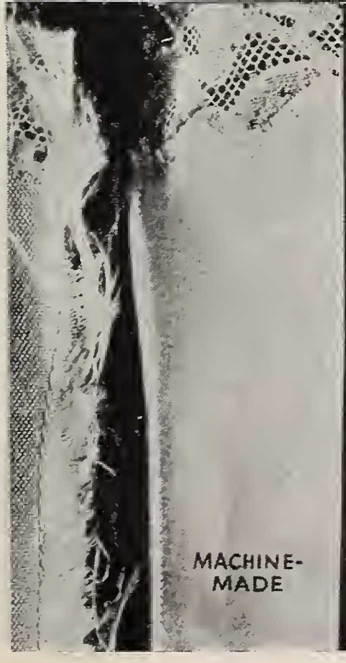
What about trim and edge finish? Is it dainty, flat, and no extra trouble to iron?


FLAT FRENCH SEAMS
LOCK-STITCHED SEAM RIGHT AND WRONG SIDE
PLAIN SEAM ON LOOSE WEAVE FABRIC
STANDING FELL SEAM

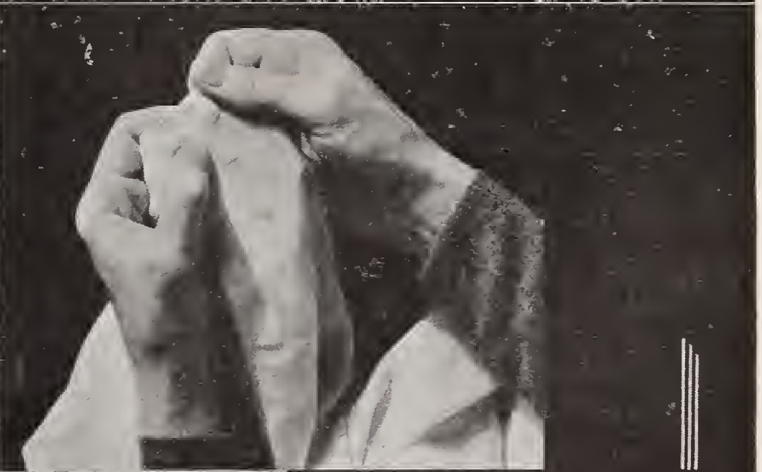
Good type seams

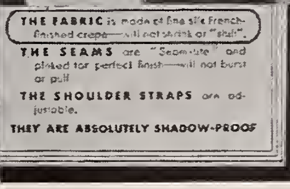
Poor type seams

Examine seams. Are they strong, flat, smooth?



Is the stitching close and even?





THE FABRIC is made of fine silk French-finished crepe—will not shrink or "shift".

THE SEAMS are "Seam-tite" and pinked for perfect finish—will not burst or pull.

THE SHOULDER STRAPS are adjustable.

THEY ARE ABSOLUTELY SHADOW-PROOF

Try the fingernail test for an evenly balanced weave.

contains no more than 10 percent of any kind of weighting or substance other than silk, provided the silk is white or a light color. On blacks, the same statement can mean that 15 percent weighting may have been added.

If you are buying a cotton slip, beware of a fuzzy finish. The cotton may be a "sticky" one and will bunch uncomfortably under a dress. A mercerized cotton fabric is more likely to have a smooth, slick texture than an unmercerized one. You should insist both on color fastness to washing, and preshrinking. The labels should tell.

Good workmanship is as important as good materials. Workmanship will lengthen or lessen the life of your slip. It will make ironing more or less difficult. Notice the seams and finishes. They should be flat, smooth, and equal to the material in durability. Thread used for stitching should be strong, neither too heavy nor too fine for the material. And close fine stitching, about 16 to 18 stitches per inch, always holds better than the long, loose kind that may be found on low-grade slips.

Obviously, the best types of seams for a slip depend somewhat on the style and the material; that is, whether the seam lines are on the straight or bias and whether the material tends to fray or is firm. Seams closely lockstitched with about 18 to 20 stitches per inch are strong and usually last as long as the slip itself.

Plain seams pinked and then stitched a second time from the right side are flat and fairly serviceable on bias seam lines. But on lines that follow the lengthwise or crosswise threads they are very likely to pull out. Standing fell seams, which are narrow and have a hard cordlike feeling and appearance, are most commonly used in medium grade slips. Sometimes they hold, sometimes they do not, but at its best, a standing fell is thick, stiff, and somewhat difficult to iron.

When it comes to the trim on slips, a most careful examination should be made. The best buys have simple insets of lace and no meaningless little spots of lace here and there. The lace itself will be uniform, not heavily corded and thick in one place, delicate in another. Lace on the hem of the slip is undesirable unless you are absolutely certain the length is right, and that the slip hangs evenly.

If lace is applied to the top of the slip it is usually by lockstitching. Material should not be trimmed off. If the trim is embroidery, drawn work, or applique, make certain that it does not weaken the fabric. Crisscross rows of hemstitching is an example of trim that weakens. To wear as well as the slip, the trim should be smooth and flat in keeping with the light weight of slip materials. If the trim is a bias binding the seam allowance should be wide enough so it can fold over with the bias to prevent pulling off.

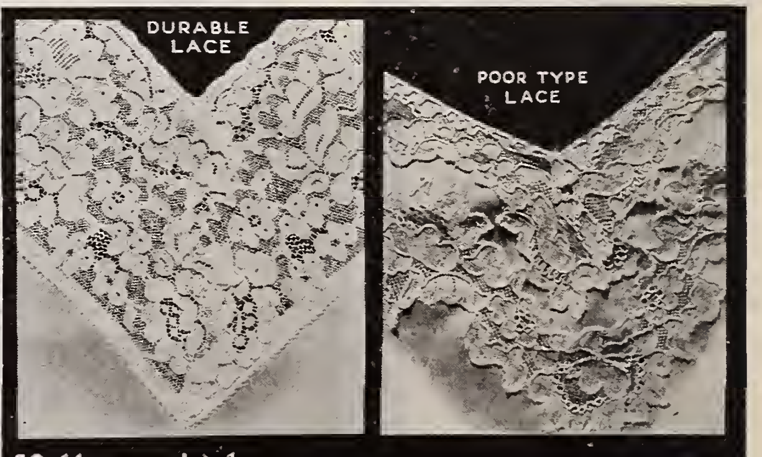
A very satisfactory tailored slip has a double layer of fabric for the bodice and double stitching around the top edge.

Shoulder straps may be a source of endless annoyance. Examine them closely. If there is lace at the top edge, straps should extend on down to the fabric. If straps are made to branch off and attach in two places rather than one, the strain is distributed so that the lace is not so likely to be torn.

Probably the most durable shoulder straps are on machinemade slips. Made of the same material as the garment, they are a double fold, cut either biaswise or lengthwise, and stitched on both sides.

Slips may be purchased from 39 cents up. Price is not always indicative of the fit or wearing qualities of the garment. Before you buy you should insist on definite information, preferably printed on the manufacturer's label or tag, but be sure not to read into labels more than they actually state.

"Pure dye" means that white or light-colored silks contain 10% or less weighting; dark silks, 15% or less.



If there is lace, is it strong — or is it weak in spots?

COOPERATION

Christmas trees now come the co-operative way. About half a million balsams and spruces were shipped during the past Christmas season by the Forest Products Association, a new producers' cooperative of 500 farmers and woodland owners of New Hampshire and Vermont. Said the Co-op tag on each tree: "This tree was cut from the mountain pastures of northern New Hampshire and Vermont, where the trees are encroaching upon the grasslands, needed by the farmer for his dairy herd, and therefore its cutting was not destructive to forests. The cutting and marketing has been done co-operatively, farmers working together as good neighbors. . ." And the Co-op trees came graded. Red, blue and white labels, respectively, bore the designations "fancy," "standard," and "ungraded."

"Working together for the good of all is one of the oldest Indian traditions," points out *Indian Education,* field letter of the U. S. Office of Indian Affairs, Education Division. How this old tradition is being made real again with the modern technique of cooperation by Indians as consumers, and by Indians as producers, is the subject of the article.

"One Indian group is thinking of buying its groceries and farm supplies cooperatively; another is planning to market its strawberries on the same basis. At least one agency has experimented with a cooperative for marketing Indian arts and crafts products, while at another agency a group of Indians bought and used heavy farm machinery on a cooperative plan. This is only a random selection of cooperative activities among Indians."

With the fairly steady growth of cooperatives during the last few years, Cooperative Leagues are being heard from, more and more frequently. The Cooperative League of the U. S. A., American member of the world-wide International Cooperative Alliance, is the national clearing house for information on consumer cooperative promotion, education and business. It is a "national federation of consumers' cooperative associations." Affiliated with it are a number of district Cooperative Leagues, (such as the Northern States Cooperative League, with headquarters in Minneapolis, the Central States Cooperative League, whose office is in Chicago, the Eastern Cooperative League, headquarters in New York, etc.) who perform a similar service for cooperatives in their respective regions. Smaller geographical areas often have their local cooperative federations or leagues to serve local consumer cooperatives in sub-regions, such as the Twin Cities and the Mesaba Range in the Northern States League area; Chicago and Lower Michigan in the Central States region; Greater Boston and the District of Columbia in the Eastern district—to name a few.

Recently created in the important industrial city of Evansville, Ind., is an "Evansville Co-operative League." Unconcerned with either cooperative marketing or consumer cooperation, its three purposes are announced as: (1) to give "facts concerning the city's industries;" (2) to "encourage the general discussion of business and industrial questions . . .," and (3) to "oppose all un-American groups. . . ." Elsewhere the League announces its aims thus: "A group of Evansville business men have undertaken to place before our fellow citizens certain facts concerning industry."

With these general objectives, probably no one would want to quarrel. Misunderstanding has already appeared, however, with regard to the use of the name "Cooperative League" for an organization removed from all the activities usually implied by the term "Cooperative."

In explanation of the word "Cooperative" in the League's name, a nationally prominent advertising man who has been called in to be a director of the League has announced: "Our earnest desire is to secure the cooperation of every civic, service, social, business, labor, religious, women's professional club, group and association in Evansville. We earnestly desire their cooperation in spreading the material we shall publish."

Aside from its vague conversational uses, the word "cooperative" has acquired a specific meaning. In 20 states, this meaning has been given legislative recognition by laws which restrict the use of the word "cooperative" to associations or corporations which are organized to engage in the economic activities of cooperative marketing or production, or cooperative purchasing, in compliance with the provisions of the State laws. Indiana does not have such a statute.

Farmer-patrons of Southern States Co-operative purchased cooperatively in 1937 three tons of fertilizer for each ton they purchased during the previous year, the general manager reports.

Your Food Supplies & Costs

Retail food costs in mid-December hit their lowest level since June 1936, as costs moved down for the third month in succession. Rapidly falling meat prices and a sharp break in egg prices counterbalanced slight seasonal price advances in butter and fresh vegetables and resulted in a 1.2 percent drop in food costs during the 4-week period. This downswing in meat prices, which has been under way since September, has been the major factor behind the 4 percent decline in retail food costs from mid-September to mid-December.

On December 14, the index of retail food costs as reported by the Bureau of Labor Statistics was 82.6 percent of its 1923–25 average, or about one-half of one percent less than a year ago. However, fruits and vegetables, eggs and fats and oils were the only food groups below their mid-December 1936 levels. The decline of 16 percent and 9 percent, respectively, in fruits and vegetables, and eggs, offset increases of 5 percent and 7 percent, respectively, for meats and dairy products. On December 15, 1932, the index stood at 64.7 compared to 105.7 on December 15, 1929.

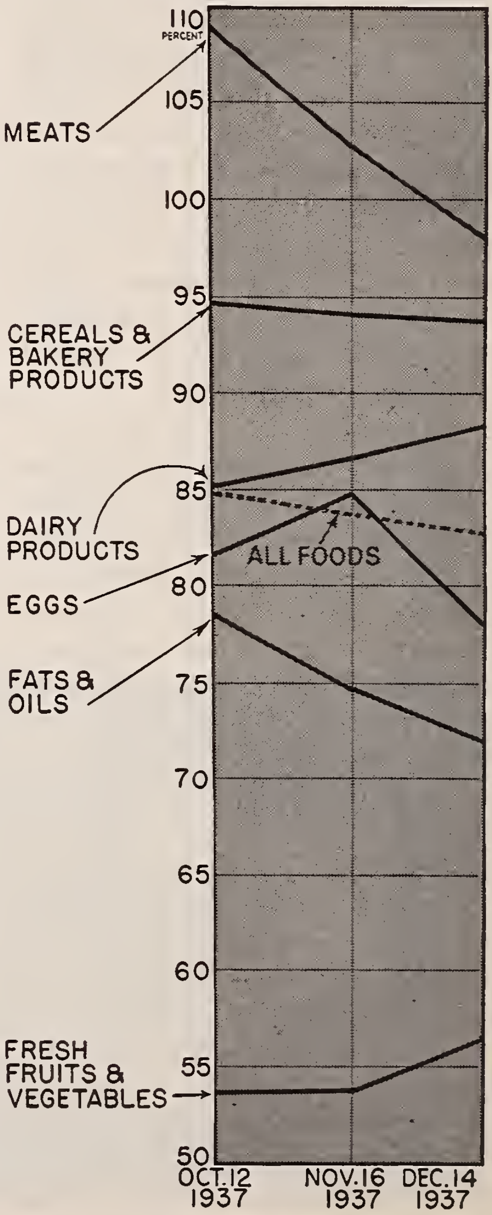
New England cities registered the sharpest decline in food costs from mid-November to mid-December. The drop here was almost three times the average change for the country. Despite this sharp decrease, the New England and the Middle Atlantic States were the only areas reporting costs higher than in December, 1936. Sharpest declines since last December have occurred in the southeastern and midwestern cities.

Dairy products and fresh fruits and vegetables were the only food groups to advance in cost from mid-November to mid-December, and a number of important items dropped to their lowest level for 1937. Dairy products went up seasonally for the sixth successive month, with butter reaching its highest level since 1929. The seasonal advance of 5 percent in fresh fruits and vegetables was the first upswing for this group since May. Oranges were an exception, declining to their lowest price since January 1935. Eggs led the downward parade and a more than usual decline resulted in the lowest December retail egg prices since 1934. Sirloin steak, pork chops, pork loin roast, and smoked ham prices hit new 1937 lows as all meat items went down in price. The cost of cereals and bakery products declined slightly for the fourth successive month, with flour prices below every reporting period since mid-1933. Prices of dried beans, prunes, canned corn, green beans and tomatoes hit bottom for 1937, as costs of dried and canned fruits and vegetables went down for the fifth month in succession.

Pork and beef prices have declined materially since reaching unusually high levels in August and September. Sharpest price changes have occurred in fresh pork and beef steaks. The decline carried pork chop prices back to early 1935 levels while lard prices were the lowest since the end of 1934. In mid-December fresh pork cuts and beef steaks, respectively, were retailing at 12.5 and 9 cents a pound below their 1937 high point. Prices of beef roasts and smoked ham and bacon, however, were only about 5 cents a pound under their peak level.

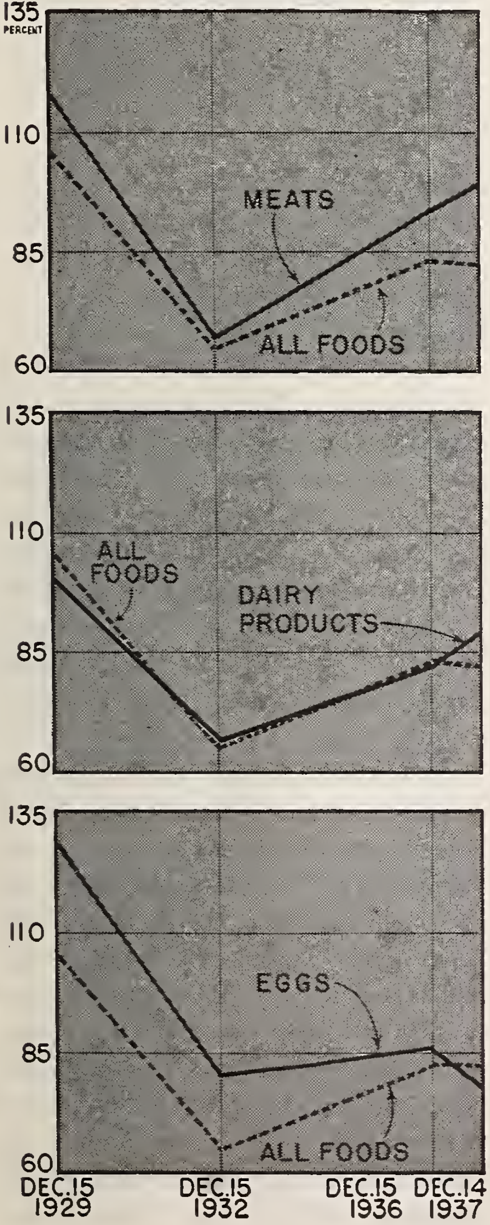
Beef prices are expected to continue moving downward during the first half of 1938 with more than usual price declines in prospect for better grade beef. Retail beef prices

A CLOSE-UP OF FOOD COST CHANGES
1923-1925=100



have dropped sharply from their fall peak, but they do not appear to have reflected fully the marked reductions in prices received by farmers for live animals. Better grade cattle are expected to comprise increasing proportions of total slaughter. Most of the increase over 1937 in better grade cattle slaughter probably will occur from May through October. From mid-November to mid-December retail steak prices declined about 2 cents a pound while roasts were 1.5 cents a pound lower. Compared with last December roasts were 2 cents a pound higher, while steak prices were only slightly different.

A PERSPECTIVE OF FOOD COST CHANGES
1923-1925=100



Lamb prices probably will not register their usual advance from January to April, and most likely will average less than a year ago. Supplies during this period consist primarily of grain-fed lambs. While total supplies will be about the same as a year ago, more grain-fed lambs are expected. With the exception of rib chops, lamb prices have shown little change since their fall peak. Retail lamb prices on December 14 were from 14 to 20 percent above a year ago.

Hog prices are expected to increase slightly during the first quarter of 1938, but most likely will remain below a year ago. This advance probably will check the down swing in retail fresh pork prices which has been under way since August. Prices of smoked products, however, probably will continue going down since they generally do not reflect hog price changes until several months after they occur. From mid-November to mid-December retail fresh pork prices dropped about 3 cents a pound while ham and bacon, respectively, were about 2 and 3 cents a pound lower. Fresh pork items and ham were slightly lower than last December, but bacon prices were a little higher.

Average retail white bread prices for the U. S. have remained unchanged since June despite a down swing in prices of bread ingredients. As a result during November and December the gross margin between retail bread prices and value at wholesale of ingredients in a typical pound loaf of white bread was at its highest level in 7 years. Retail flour prices have moved down steadily since July and on December 14 were over half a cent a pound less than a year ago. Bread prices on the same date, however, were half a cent a pound above December 1936.

Poultry marketings during the first half of 1938 are expected to be smaller than in 1937 but winter broiler supplies will be substantially larger. During the first six months poultry supplies come primarily from cold storage, and prices tend upwards. Current storage stocks are about a third less than last year's record holdings, but above average. Prices probably will move up less than usual from January through May in view of the present relatively high prices resulting from the unseasonal price increase from July to October in 1937. On December 14 the retail price of roasting chickens was one-half a cent a pound less than in mid-November, 6 cents a pound above a year ago and the highest December price since 1929.

Egg prices during 1938 probably will average above their 1937 level, and the spread between 1937 and 1938 prices is expected to widen after the spring. The number of layers in farm flocks on January 1 was the smallest on record. This factor will tend to keep production below a year ago despite liberal feed supplies. Unless extremely cold weather in January or February temporarily checks production, egg prices should tend downward until the low point is reached in April or May. Largest price declines generally come in February and March. Retail egg prices on December 14 were 5 cents a dozen less than in mid-November and 6 cents a dozen below a year ago.

Butter prices are expected to continue downward until they hit bottom next June. Seasonal price declines usually are not large until April and May.

Orange production prospects improved during December as favorable growing conditions boosted the record production reported on December 1 by about three-quarters of a million boxes. The increase was all in California Navel oranges, which together with Florida oranges comprise bulk of marketings from October to May.

PAYING FOR SPACE TO LIVE

[Concluded from page 6]

size of city is no general guide to the average cost of rent in these New England cities. In Providence, with its population of a quarter of a million people, rents paid at each level by the families with incomes of from $500 to $1,500 average about the same as in Wallingford, Connecticut, which has a population of some 11,000. Highest rents were found for the 3 income groups in Haverhill, Massachusetts, a city of close to 50,000 people. Westbrook, Maine, and Wallingford, Connecticut, are places of the same size, but average rents paid in the former were between $3 and $6 higher than in the latter town.

Chiefs of the survey hasten to point out that these rent averages apply to native white families only. In the more industrialized cities, where there is a large proportion of foreign-born residents, average rent for an income group would probably have been slightly less if the foreign-born population had been included. In a town such as Westbrook, Maine, the data here are more representative of the whole community because of the small foreign-born population. But the same is not true of the figures given here for the factory town of Willimantic.

What the average New England native white family pays for rent is in itself an informative story. But it becomes even more interesting in revealing how different rents reflected different types of jobs.

Families were divided into three groups, according to the general type of occupation from which the chief earner derived his income. In the first were wage earners; then clerical workers; and in the third, business and professional people.

At all three levels of income, it seems, wage earner families in these New England places paid in general less for rent than did the other occupational groups. Families of clerical workers spent on the average from one to 4 dollars a month more for rent than did families of wage earners. Families of business and professional workers, in turn, paid from one to 5 dollars a month more than the clerical workers' families.

Differences, too, show up in the size of the families in the 3 occupational groups. In most of the industrial communities, although wage earner families generally spent less on rent, that amount had to provide housing for what was usually a larger family. In Willimantic, for example, the average wage earner family was 3.7 persons, compared with 3.3 for the family of business and professional workers. Yet, the wage earners paid on the average about 6 dollars less a month for a place to live.

In the more provincial areas, such as Westbrook, Greenfield, and the Vermont and Massachusetts villages. as family size increased, rents increased. In the villages, for example, the families paying least for their housing ($13.85 a month) averaged 3.6 persons, while there were 4 individuals on the average in the $1,500 to $2,000 income family paying a monthly rental of $22.00.

BELOW THE CREAM LINE

[Concluded from page 8]

this nutritious product, in how to use it for drinks, in soups, in sauces, in gravies, in baking, goes along with every package of dry skim milk which the Government has distributed. More than a gift of food, this little bag carried along with it a practical example of how families with small purses can work milk into their diets at the lowest possible cost. One pound of dry skim milk is the equivalent in fool value of 4¾ quarts of fresh skim milk. Bought at 15 cents a pound it would provide, when mixed with water, fluid skim milk at 3 cents or less a quart. By combining three-quarters of a cup of the dry milk and 1½ ounces of butter, the equivalent in food value of a quart of whole milk is obtained.

Already results show in the records of the relief workers who have been handling the distribution of dry skim milk, in the letters which the Federal Surplus Commodities Corporation receives from the families who have used it and from dealers whose customers ask for it. Writes one large firm of grocers in the middle west:

"We have received some inquiries from the South for one-pound and 30-pound packages of skim milk powder and are told that they are coming from consumers who formerly were served by the Government as relief clients. We do not pack anything of this nature at the present time. . . . We wish to inquire if you could tell us in just what districts the distribution of this product was made, so that we might investigate as to whether there is a market. . ."

A Southern consumer writes to Washington: "Will you kindly advise me if possible where I can procure the skimmed milk that the Welfare agents dispense to the needy—I've tried all the grocery stores and no one can tell me where to get it. . . Several people have asked me to find out where it could be bought cheap. Thank you very much."

From across the country, comes another report. The leader of a home economics project in Texas writes: "More homemakers are becoming interested in the dry skim milk each week. Every dish contains it in some form. Many of our guests are receiving it from the Relief Commission; others are buying it from the bakery at 15 cents a pound which mixes up one gallon of skimmed milk. We believe many mothers are begining to accept the truth of our teaching that at less than 4 cents per quart anyone can afford to have milk. . . Each week we learn of new customers of the dry skim milk."

Slowly but surely, out of this emergency work of the Government, the almost forgotten milk product is gaining a recognition long deserved but much neglected. If you want to know how to work dry skim milk into your baking, write to the Bureau of Home Economics. Pass along to your baker their formula for the school lunch loaf, if you buy your bread. Ask your grocer for dry skim milk. It should be on the shelves of every grocery store. If it is not, keep on asking for it.

CANNED FOODS FOR DOGS

[Concluded from page 11]

Pure Foods Act, any canned dog and cat foods that consist in whole or in part of filthy, decomposed or putrid animal or vegetable substances, of any portion of any animal or vegetable unfit for food, whether manufactured or not, or if it is the product of a diseased animal, or one that has died otherwise than by slaughter."

Twenty-seven States exercise some degree of supervision of dog food: 4 under food laws; 23 under laws regulating the sale and labeling of commercial feedstuffs. Feedstuffs laws, usually more specific as to labeling requirements than are pure food laws, generally require labels to declare the chief ingredients and food elements of feedstuffs. A few States call for publishing the results of tests by brand names.

Feedstuffs laws apply to feeds used for cattle, sheep, etc. But as the State of Connecticut's agricultural experiment station declared in a recent bulletin, "Dog feeds have not heretofore been included in our annual inspection of feeding stuffs. The growth of this industry and the number of brands available make it desirable to include such feeding stuffs in regular inspection."

Federal authority over the labeling of canned dog food, resting with the Food and Drug Administration, extends only to control over the accuracy of label statements. The Food and Drug Administration cannot require manufacturers to indicate the source of a can's content, or even to name its ingredients. But if any one ingredient is named on a product shipped in interstate commerce, all must be named, including added water, and the contents must live up to the label. Shipments of canned dog food occasionally have had to be seized for "adulteration" and "misbranding." But Food and Drug inspectors—104, covering the entire United States—have more than their hands full checking food and drugs for sale to humans, and have found it impossible to attempt real supervision of interstate shipments of dog food.

Over the advertising of dog food, the Federal Trade Commission exercises such authority as it derives from its general mandate to seek to prevent "unfair methods of competition." It has occasionally cited dog food manufacturers for making claims which, according to the Federal Trade Commission, constituted unfair competition in interstate commerce.

Congress has given no Federal bureau power to set standards of quality or purity for canned dog food. Dog lovers in various States can consult their State departments of agriculture, health, or markets, to find out what State standards of quality and of labeling are set and enforced, and whether there is inspection of packing plants doing business within the State. In this connection, they might find it informative also to compare pure food law protection as it applies to food for human and animal consumption.

We acknowledge, with thanks to the following agencies, some of the photographs appearing in this issue:

Farm Security Administration (Mydans, Photographer), cover and page 3;

Washington Star, page 9;

Bureau of Home Economics: all photographs on slips.

STUDY QUESTIONS FOR THIS ISSUE

1. What would you say was the typical income of native white families in each of the New England places described in the first article?
2. How much of the income of the families in these income groups went for rent in 1935–1936?
3. As incomes increased, did rent take a larger or a smaller proportion of the family budget?
4. Did expenditures for rent vary directly with the size of the locality in New England?
5. Which type of families usually paid most for rent: wage earner, clerical, or professional?
6. Which type of families had on the average the largest number of people?
7. How do the schools in your city buy bread for school cafeterias and lunches?
8. How does the quality of the bread provided compare with the Bureau of Home Economics' school lunch loaf? (You can get the formula for this loaf by writing to that Bureau in Washington, D. C.)
9. How does the food value of dry skim milk compare with that of whole milk?
10. What has the Government been doing to educate people in the value of use of dry skim milk?
11. Is dry skim milk sold to household buyers in your community?
12. What could your consumer organizations do to make it more available for such buyers?
13. Does any Federal Government agency inspect canned dog food? Describe the limits to that inspection.
14. Are there any standards, qualitative or quantitative, for canned dog foods set by your State?
15. How do those requirements compare with standards for canned foods for humans?
16. What six features should you examine carefully before buying a slip?
17. Is there a law in your State which defines what is a "cooperative?"

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CONSUMERS' Guide

VOLUME IV, NUMBER 22 JANUARY 31, 1938

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BREAD BASKET PROBLEMS

CONSUMERS' Guide

Issued every two weeks by the
CONSUMERS' COUNSEL DIVISION
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VOL. IV, NO. 22 JANUARY 31, 1938

BREAD SPREADS" made the headlines again in January when Consumers' Counsel D. E. Montgomery revealed that "not since December, 1930, has the bakers' and retailers' margin been as large as it was in November and December, 1937. The average retail price of a pound loaf of white bread for the country in December was 8.7 cents and the average cost of ingredients in a typical pound loaf was 2.6 cents. This left an average gross margin of 6.1 cents for bakers and retailers.

"On few occasions during the past 24 years," the Consumers' Counsel pointed out, "has the spread between ingredient costs and retail white bread prices topped the figures of November and December of the year just past."

What January's prices have done to this picture has not been officially reported as we go to press.

For 7 months, from June through December, 1937, the average cost of white bread per pound for the country stayed at 8.7 cents. During this same period the wholesale cost of the most important bread ingredient dropped off sharply. Flour of the kind generally used in commercial bread baking was quoted in December at from 75 cents to $1.25 a barrel below prices prevailing in June, or an average of almost a third of a cent a pound loaf less. Lard and lard substitutes fell off more than 3 cents a pound. Yeast and malt costs remained steady throughout the 7 months. Sugar, salt, and milk costs shaded off, but only slightly.

On the basis of a typical formula for commercial bread, total ingredient costs in a pound loaf of white bread would add up to 2.62 cents in December, as against 2.96 cents in June, 1937, representing an increase in the gross margin of bakers and retailers of one-third cent on the average pound loaf of white bread sold in the country.

Bread prices are reported by the Bureau of Labor Statistics for each of 60 cities. Average prices in 24 cities were higher in December than in June; in 23 cities, they were the same in both months; and in 13 cities, December prices were lower than in the middle of the year.

Contrasted to the steady price of bread, wheat flour sold to consumers at an average of 4.3 cents per pound on December 14, compared with 5 cents in June. Soda crackers also sold well below the June average. Wheat cereal was down slightly. Whole-wheat bread and rye bread, like white bread, remained unchanged at average prices of 9.8 cents and 10 cents per pound, respectively. Pound cake in December sold at more than one-half cent a pound above its June average of 24.8 cents.

Background facts on bread are featured in our first story of this issue which highlights the findings of the Federal Trade Commission study of the economics of wheat.

SHOPPING for food these days," writes a Pennsylvania consumer, "is getting to be an exercise in higher mathematics, it seems to me. Down my street are two stores. At one, they sell dressed roasting chickens for 35 cents a pound. At the other, they sell chickens that are dressed and drawn, and charge 47 cents a pound for them. Now I have sense enough to know that if I buy a chicken at the first store I am going to pay some money for waste which I must remove before I do my cooking. The second store removes that waste, but am I paying more *per pound* for the chicken which the store draws than for the one I draw at home? If so, how much?"

Here's for some more arithmetic, for that's the only way to answer this consumer's conundrum. First get terms straight: A "dressed" chicken is a bird which has been plucked and bled, but with the entrails, head, and feet unremoved. A "dressed and drawn" chicken has had removed the head, feet, and entrails, in addition to being bled and plucked.

A drawn chicken will weigh approximately 25 percent less than the same chicken which has been dressed, only. This is a round figure. The smaller the bird, the larger—usually—is the percentage of weight lost. On a broiler weighing under 2½ pounds, the loss may be as much as 28 or 29 percent of the dressed weight.

Take the round figure of 25 percent. That means for every pound dressed weight for which you pay 35 cents you are getting three-quarters of a pound in drawn weight. Putting it the other way around, for every pound of drawn weight you would have to pay at the same rate, 47 cents a pound. (Multiply the 35 cents by 4 and divide the result by 3.) . . . Suppose dressed chickens are selling for 30 cents a pound. Again by this operation on your cuff, you will find that the equivalent cost of a pound drawn weight is 40 cents.

Of course an easier route to these comparable figures is to get your grocer or butcher or poultry man to do the arithmetic for you. But wise consumers should, if they can, check for themselves!

BREAD BASKET PROBLEMS

Wheat, most staple of foods, has been a persistent source of problems since the first bearded wheat berries ripened red gold in a field of grass on the ancient Abyssinian Plateau. Wheat problem No. 1 today is the distribution of wheat.

Congress, looking gravely at distribution costs, directed in 1935 the Federal Trade Commission to examine into agricultural income from principal commodities, and the Commission selected 6 farm products, among them wheat, to find out what could be done about this ancient, yet modern, riddle.

Investigators for the Federal Trade Commission set to work. They visited country elevators, city elevators, terminal markets, wheat exchanges. They examined the books of milling companies, baking companies, grain brokers, and now they present their findings.

World wheat figures are astronomical. Each month of the year somewhere in the world wheat is harvested. Millions of people work on the total world wheat crop of 6 billion bushels which some 750 million people eventually consume.

In the world America ranks second in the production of wheat, one place behind the top-ranking Soviet Union. Our total production in an average year amounts to some 800 million bushels, and its value to around $650,000,000. An average crop will cover about 70 million acres, and on its sale half a million farmers depend for their main source of livelihood. Transforming wheat to bread in the United States, gives full time employment to some 250,000 persons other than farmers.

Act 1 in the 4-act drama of wheat

More explorations into the Federal Trade Commission's inquiry into the fortunes and misfortunes of farmers and consumers

is the production on the farm. In America the stage for this act is set on an enormous T-square which has, as its perpendicular, a broad strip of land from Ohio to Kansas, and as its top bar another broad strip of land from Texas to the Dakotas. Other areas in the United States produce wheat—the Plateau of the State of Washington, Oregon, and Idaho, and many other States, but the great T-square is America's bread basket and, to a small extent, the world's bread basket. Eighteen out of every 100 bushels of American wheat are grown in Kansas, America's No. 1 wheat State. From North Dakota come 10 out of every 100 bushels; and from Washington, in the far West, come 6 out of every 100 bushels.

Commercially-grown wheat in the United States falls into 5 principal classes. Hard red spring wheat—used for bread flours—makes up 16 percent of the total American wheat-producing acreage. This wheat ripens on the plains of the Dakotas, Minnesota, and Montana. From this same area comes Durum, the macaroni wheat. Five percent of American wheat is of this variety. Hard red winter wheat which grows in Kansas, Nebraska, and Oklahoma supplies a bread flour. East of this wheat belt, is the soft red winter wheat region, which stretches from Eastern Kansas to the Atlantic Coast. This wheat is used chiefly for the manufacture of pastries, crackers, biscuits, and bread flour for home baking. White wheat, the fifth variety, takes up 12 percent of the space in the American bread basket. It is grown chiefly in the far West, though some of it is grown in Michigan and New York.

For each bushel of seed planted the farmer expects to harvest from 10 to 20 bushels of grain. Modern wheat harvesting is as thoroughly mechanized as a factory. In fact, a modern wheat combine is a factory that moves up and down the rows of rich ripe grain cutting off the heads of wheat, threshing it by means of mechanical knives, winnowing it by mechanical blowers and shakers, and then delivering the wheat berries to wagons alongside the factory by means of chutes. To produce 100 bushels of wheat—including the time required before harvesting and in harvesting—it now takes an average of 49 hours of one man's time. Fifty years ago the job with machinery of the time, required 129 hours.

Second largest producer of wheat, in good years this country ships many millions of bushels abroad. Ordinarily the price which American farmers have received for their wheat, whether sold at home or abroad, has moved up and down with prices of wheat produced throughout the world

Second act in the drama of wheat is the transportation and marketing of the grain. The harvested ripe grain is loaded into wagons or trucks by the farmers and hauled to the country elevators. There it may or may not be cleaned and graded. The farmer may sell his wheat on delivery or it may be held at the elevator for future sale. The elevator sends the grain to centers like Minneapolis, Kansas City, or Chicago. While part of the wheat is likely to be milled without further ado, some of it is taken out of freight cars, put into huge elevators and held there although ownership of the wheat may change hands a dozen times or more. Finally, the wheat is loaded again into freight cars or cargo boats and shipped perhaps to an Eastern mill, perhaps abroad for bakers of foreign breads.

Nerve center of the wheat system, source of the impulses that move wheat around the world, is a great oak paneled room in the Chicago Board of Trade. Here, beneath huge blackboards chalked white with wheat prices, in a room 5 stories high, 165 feet long, and 113 feet wide, is the wheat pit. The wheat pit is an actual pit, an 8-sided well surrounded by a solid teakwood wall, into which brokers enter, first by walking up 4 steps and then by walking down 7 into the well itself.

Trading begins at 9:30 in the

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Nerve center of wheat economics in this country is this great oak paneled room in the Chicago Board of Trade where a sale, indicated by a twist of the hand, becomes a marching order for some quantity of grain to move from elevator to mill

morning when several hundred men in tan jackets crowd together and begin to call to each other, wave their hands, jot down notes, nod, and then finally signal the sale or purchase of wheat. A palm facing toward the body indicates an agreement to buy. A palm facing out indicates the seller's agreement to sell. The price is indicated by the fingers. Over head, on a narrow cat walk, around 3 sides of the huge room, agile young men mark up the blackboards recording the sales.

Grain on the wheat market is either cash grain or futures grain. Cash transaction involves grain for immediate delivery. At one end of the trading room samples of this grain in long paper bags are spread on a double row of tables. Buyers examine the samples, cogitate on them and then, as particular samples satisfy, buy them. The sales then become marching orders for carloads of grain to move toward a mill, elevator, or export.

Futures grain is grain purchased or sold for delivery at some specified month in the future.

Before the Civil War, favorable weather sometimes filled Chicago's harbors with grain vessels at times when there was no grain in Chicago. Delays in finding cargoes cost owners money. To insure themselves against losses through such delays, by 1848 the men who owned and chartered grain boats, began to buy grain on a "to-arrive" basis for delivery on a specified date. On that date if the seller could deliver the grain, well and good; but if he could not deliver grain from his own supplies he had to go out and buy some to make good on his contract. In this case, if the grain he purchased for delivery cost more than the price he had contracted to receive, he lost money. If it cost less, he made money. From this situation then arose an opportunity for speculators to risk their judgments in the hope of profit on the movements of grain prices. Wheat futures became a perfect instrument for speculation.

Legitimate grain merchants and millers, however, are not speculators; they want grain for processing on certain dates. To protect them from the hazards of price movements, a device called "hedging" has come into use.

Suppose, for instance, a miller will need a thousand bushels of wheat at the end of six months. To insure the delivery of this wheat at that time, he places an order today for the wheat to be delivered at the end of six months, contracting to pay the current price of futures wheat, say, $1.00 a bushel. However, if during the six months wheat falls to 90 cents a bushel, this miller will have to pay 10 cents more for every bushel of wheat than his competitors.

Not wishing to chance a loss, and not interested in the speculative gain which would occur if the market went up, the miller therefore, hedges. At the time he places his order for 1,000 bushels at $1.00 per bushel, he also contracts to sell 1,000 bushels of wheat which, let us assume, is at the same price. Then, if wheat drops to 90 cents per bushel the miller buys wheat to make delivery on the 1,000 bushels he has promised to deliver at $1.00 a bushel or, as is more frequently done, he settles at the market price. Net result on this transaction is a profit of 10 cents per bushel. But, at the same time he also takes delivery on the wheat he has promised to buy for $1.00 a bushel for milling. Net result on this transaction is a loss of 10 cents per bushel at current prices. Balancing the two together, the miller comes out even—he has neither gained nor lost. For this insurance against price change to protect his regular trading margin, he has only to pay brokerage fees.

Hedging is intended to protect the miller's (or grain trader's) gross profit. Theoretically at least the hedge insures the cost of the grain element in his manufacturing costs.

To be able to buy and sell whenever necessary, the miller must have a market where there are persons who are always willing to buy when he wants to sell, or who are always willing to sell when he wants to buy. In the wheat futures market speculators help to perform this service, enabling grain men to hedge. Thus, say the defenders of the grain futures market, speculation is justified.

Pretty theories, however, do not always work out as well in practice as they do in syllogisms. Looking at the grain futures market, the Federal Trade Commission came to the following conclusions.

The theory will work in a perfectly competitive market where no one is able to manipulate prices, in a market which is open to everyone, and in a market around which no restraints are thrown. Lacking these conditions, strange things can occasionally happen in a wheat futures market.

One example of what can happen is cited by the Federal Trade Commission. In April, 1931, speculators began to buy corn for July delivery. By June 30 they had purchased 8½ million bushels of corn, had jammed up all the facilities for storage in Chicago to such an extent that some corn had to be stored in boats on Lake Michigan. On delivery day those persons who had contracted to deliver corn were unable to buy corn in Chicago to make their deliveries. Up went the price of corn as they bid for it, 14 cents in three days. Then, delivery time over, and all speculative debts settled, the price of corn came down again, faster and farther.

Net result of this extravaganza, except for the gains and losses of speculators, was to concentrate in Chicago millions of bushels of corn which could not be used there, and which took a year getting back to the normal channels of distribution.

To eliminate the objections to the grain futures market, the Federal Trade Commission says, large speculators must not be permitted to trade in grain for purely speculative purposes in inordinate amounts.

Delivery on grain on futures contracts according to Board rules must be made in Chicago but, says the Federal Trade Commission, if a speculator ties up all the facilities in Chicago, artificial price manipulations can result from the corner. Pointing to cotton the Federal Trade Commission says, cotton may be delivered on New York futures contracts at any one of several southern cotton markets. Thus by a similar device the necessity for the shipment of wheat to Chicago could be limited, and at the same time, the manipulation of futures prices could be prevented.

Next grain problem considered by the Federal Trade Commission was the ownership of elevators. Since most farmers' grain is sold in a 4-month period, though the grain itself is used over a 12-month period, those grain dealers who control storage often are in a position to dominate and control many phases of the marketing of grain. The recognition of the importance of storage has led to many State and Federal laws regarding grain elevators.

Prior to 1890 railroads built ele-

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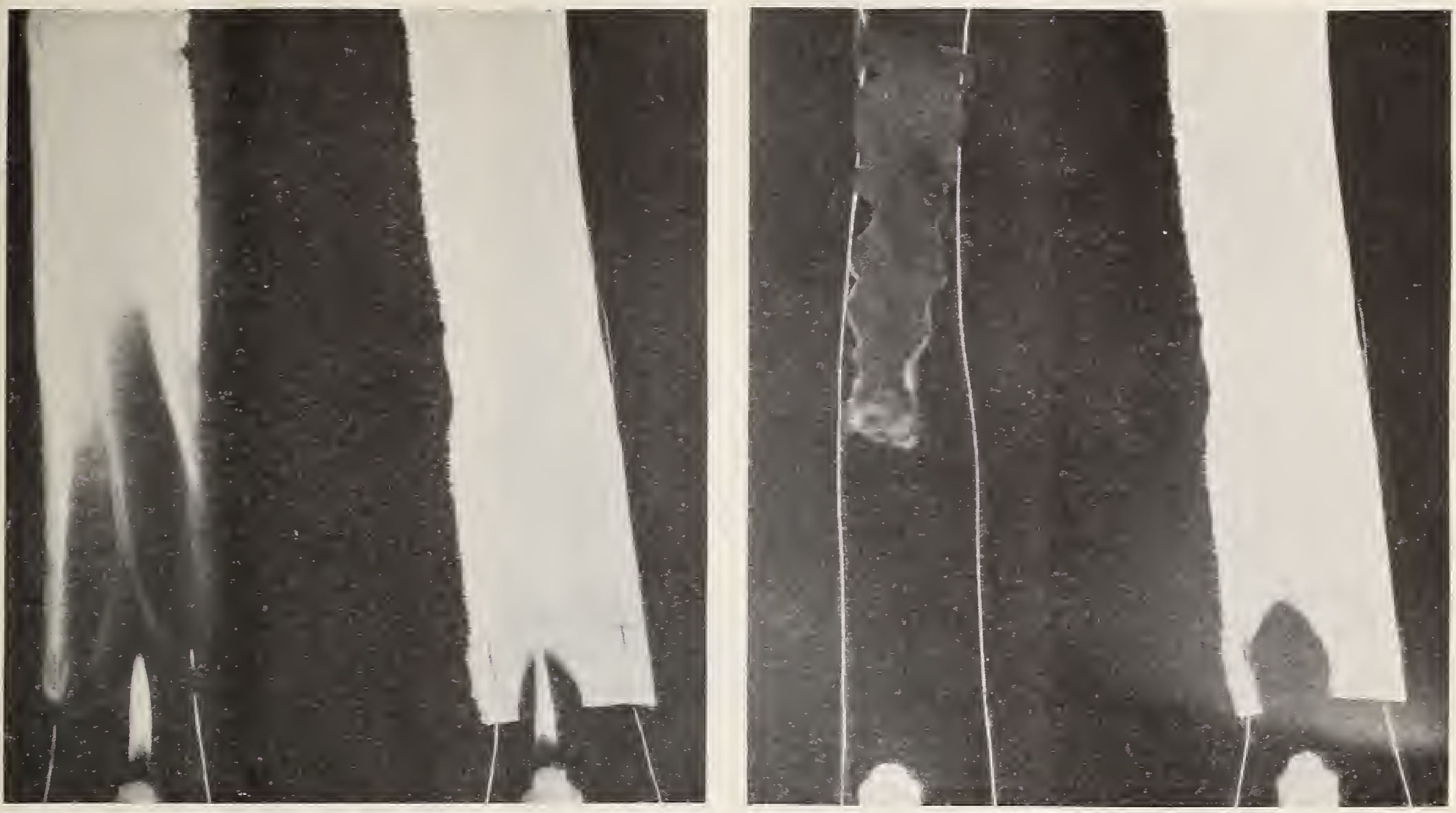
Since most wheat is produced in a 4-month period but is needed over a 12-month period, storage facilities and financing are major problems in wheat distribution. Who controls them and how, are questions scrutinized by the Commission's experts



Fireproofing will not prevent a fabric from charring, but it will halt the spread of the flames. These pictures show how untreated and treated strips of cotton cloth looked after they had been burning for 20 seconds (left) and for a minute (right)

An Ounce OF PREVENTION

Ask any fire chief what the main cause of fire destruction in the home is. Chances are he will have a single answer: carelessness. But that is only half the story. The millions of dollars of property losses in the home which annually go up in smoke are due as much to lack of *prevention* as to carelessness.

No accurate estimate has been made of the value of home property turned to ash annually as a result of fire. Roughly—very roughly—experts say that about half of the approximate $350,000,000 fire toll every year represents losses of private homes and property. No matter what the figure is, it does not measure the toll taken in family happiness and security. But the toll can be lessened by fireproofing, a process both inexpensive and simple, and a safeguard against the constant threat of fire wiping out in a few hours the home and investment in that home which might have taken years to build up.

A doctor, seeking to prevent disease, first finds the cause of that disease and then looks for a way of eliminating the cause. Similarly, fire-prevention means checking the cause of fire at its source by eliminating the chance of fire from the first. It is here where fireproofing is important. Many fires in the home find their source in the kitchen, where a curtain by an open window may blow into a gas flame, or an overheated iron may cause an ironing board cover to burst into flame, or a hot stove might ignite a pot lifter. Others start in other parts of the

Fireproofing is one way to cut the cost of clothes and fabrics, and to safeguard the home against major losses from minor calamities

house, near an open fireplace where rugs and draperies alike are constant fire hazards, or near electric heaters—in short, anywhere where inflammable fabrics are exposed to heat and flames. It is these fabrics which must be fireproofed if the home is to be safeguarded adequately against fire.

Fireproofing cloth and other material is simpler than doing the family wash and can be done with a minimum of time and trouble. As a basic aid to fire-prevention in the home, every housewife (and husband, for that matter) should know these processes. They should be their own fire wardens within the confines of their home and family.

Giving a fireproofing treatment to a fabric can do one of two things: It can smother a fire starting in the fabric by surrounding the flame with non-combustible gases; such a fireproofing agent acts in the same way as do carbon tetrachloride and carbon dioxide used as basic chemicals in fire extinguishers. Or it can melt and "seal off" the fibers of the treated fabric, preventing the flames from gaining any headway. Only partly responsible for checking the flames is this "sealing action." The melting of the fireproofing chemical by the heat results in the automatic operation of a miniature "sprinkler system" within the fabric itself. Moisture in the chemical is given off in the form of steam and acts as a partially effective defense against the flames.

It is this second type which can most easily be prepared and applied in the home. Borax, boric acid, and hot water are all that are needed for the amateur kitchen chemist. Seven ounces of borax, 3 ounces of boric acid powder, and 2 quarts of hot water comprise the formula for a good supply of the fireproofing liquid. The borax and boric acid are merely mixed into the heated water until a clear solution is obtained. Powdered boric acid will dissolve more readily if it is first made into a paste with a small quantity of hot water.

This so-called "borate solution" has been found by laboratory explorers to rate high for use on fabrics. Any drug store sells the chemicals which are so harmless that the careful housewife need fear no injury to her hands.

A few minutes after the picture on the left had been taken, the smouldering ironing board cover was in flames. Fireproofing the cover eliminates this common fire hazard, as the right-hand picture shows

Step number two in this kitchen-laboratory method of fireproofing is a job that the ten-year old daughter of the family can be trusted to do. The article to be treated is dipped into the warm borate solution, wrung out by hand or through a clothes wringer, and hung out to dry on the family wash line. Bulky articles—draperies, carpets—can be sprayed with the solution with an ordinary garden sprayer. Convenient for some housewives is the method of sprinkling the fabrics with the solution, instead of with water, before they are ironed. Though effective when done correctly, this method will fail of success unless care is taken to see that the fabric is well saturated with the solution. The fabric should be nearly dry before it is ironed, and then only a moderately hot iron should be used on it. Failure to do this will result in the borax in the fireproofing solution sticking to the bottom of the iron and interfering with the movement of the iron. If that happens, the borax can easily be removed by wiping the bottom of the iron with a wet cloth.

New fabrics that are heavily sized and water resistant do not absorb the fireproofing solution very readily; the solution coagulates and "bunches together" in small drops. A "wetting agent" mixed with the solution will get around this difficulty by spreading the fireproofing liquid evenly over the texture of the material. Powdered or flake soap mixed with the solution until suds are formed will usually suffice. A wetting agent similar to those used in commercial dyeing will be a satisfactory substitute when soap is made ineffective by hard water or when it leaves a visible film on drying. A small quantity of such a wetting agent—about one-fourth of an ounce to a gallon of solution—will do the trick. Firms handling dyers' supplies are the best places in which to buy the wetting agents.

With the borate solution and with other types of fireproofing solutions, care should be taken to see that the fire resistance of the fabric after drying is satisfactory. Best way of doing this is to treat scraps of material similar to the garments or other cloth articles which are being fireproofed. A flame applied to the dry scraps will be a ready clue to the fire-resistance of the treated articles.

What should be fireproofed? Cotton fabrics stand at the top of the list. After them come children's play suits, cotton rag rugs in front of an open fireplace or near a stove, curtains and draperies near flues and open fires, ironing board covers and kitchen pot lifters, fabric screens in front of fireplaces, fabric panels that hide wood or coal for the fireplace, fabric heat deflectors for stoves, and—as a reminder that the yuletide season can be one of tragedy as well as one of joy—trimmings for Christmas trees which so often cause a Christmas happiness to be turned into horror.

Very few fire proofing methods are lasting. Laundering, exposure to the elements, rain, all result in the diminishing of the resistance of the treated article to fire. Some fireproofing agents, such as tin oxide, are not affected by rain or weather, but the complicated process of treatment makes it unwise to attempt use of these agents in the home. For that reason the fireproofing process should be repeated after washing or exposure to bad weather.

This age of modern methods of home insulation, air conditioning, and automatic oil heat is a far cry from the old fashioned practices of insulating with loose cotton and sawdust. But even today many homes are kept warm with sawdust spread over unfinished attics to prevent heat losses through the ceilings of the rooms below, or with cotton packed tightly in wall and floor cracks. Here again fireproofing is important. For adequate protection against a disastrous fire getting a head start in one of these highly combustible materials, they should be treated with any one of three simple chemical solutions before they are used for insulation.

The first is made by dissolving one pound, 9½ ounces of ammonium sulphate in a gallon of water. The

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Dampening unironed fabrics with fireproofing solution, instead of with water, is a wise precaution. The fabric should be well saturated with the liquid and then allowed to become almost dry before ironing with only a moderately hot iron

Over half a billion pounds of salmon are fished from the cold waters of Alaska, Washington, and Oregon each year. Canneries claim about 4 out of every 5 pounds of this enormous catch

FISH on Your Diet

AMERICAN fisheries were important even before this nation was born. European fishermen—French, Portuguese, and English—had been sailing every year to the Newfoundland banks to fish for cod before the first white settlements in North America.

Cabot in 1497 brought back from his voyage the report that in the waters off Newfoundland "the sea is covered with fishes."

In the year Sir Frances Drake set out to girdle the globe, 300 ships sailed from European ports to fish for cod in American waters. Descendants of Drake and Cabot settled in New England, among other reasons, to get closer to fisheries and to have a nearby landing place for drying and salting the cod.

Fish had long been a concern of English statecraft. Writing in 1549 on "Policies to Reduce this Realm of England unto a Prosperous Wealth and Estate" an English writer had declared ". . . it were very requisite that there should be as much fish spent in the realm yearly as was wont to be heretofore, for else will fish and other victual also rise to an unreasonable price. And surely there is nothing that will sooner move the people unto sedition than the dearth of victual."

The New England fisheries are the oldest commercial enterprise in the whole country. Exploited for over 400 years, New England's fisheries still produced 655 million pounds of fish during 1935—about one-sixth of the total American catch; and the time-honored cod accounted for 120 million pounds.

Great is the variety of American fishes and cod is no longer king. Our 160 common species of food fish—to mention only a few—include the salmon, which the Indians used to hunt with bows and arrows, spears, and traps; the glittering, iridescent mackerel; the Maine herring, canned as the sardine; the plentiful pilchard of the Pacific Coast, likewise known in its canned form as the sardine; the fat river catfish or bullhead with spikes and feline whiskers; the trout beloved by sportsmen; the great flat halibut which flourish in the colder oceans.

Our colorful American speech gives many different names to the same fish. The Norfolk spot is the

Facts you should know when you buy fish

"goody" in New Jersey, the "chub" at Charleston, South Carolina, the "chopa blanca" at Pensacola. That gamy food fish known to New England and the Middle States as the bluefish, is the "tailor" or the "greenfish" to Maryland, Virginia, and North Carolina; the "skipjack" south of Cape Hatteras; and again the bluefish in the Gulf of Mexico. A sea trout from Chesapeake Bay becomes a "weakfish" if it swims north to the Jersey coast.

Variety in species of fish presents the shopper with a harder problem than is the case with potatoes or oranges. We may live near vegetable gardens or orchards, but the only time most of us see the denizens of sea and stream is when we go to fish market. "It would be extremely difficult, if not impossible for the average housewife to learn to identify all the various species of edible fish as they appear in the market," says a Bureau of Fisheries technologist. "This should not be necessary where the dealer is reliable."

Recognizing freshness is almost as hard as recognizing species. Fish and shell fish have a delicate structure, in which chemical and bacteriological changes take place more rapidly than in any other food. They spoil easily if not handled with care. Fresh fish must be well iced to be protected from spoilage and contamination.

First rule to observe in buying fish is to be sure that the flesh is firm and rigid, and does not yield to pressure of the finger. If a whole fish is being bought, the eyes should be bright and not sunken; the gills should be free from great discoloration or suspicious odor; the scales should cling to the skin, and not come off too easily. Consumers should not buy fish which they suspect of being tainted.

Fresh fish should be kept cold until prepared for the table. Before putting fish in the refrigerator, however, wrap well in waterproof paper.

Along the waterfront at Gloucester, Massachusetts, one of the important centers of New England fisheries which are the oldest commercial enterprise in the country and still account for about one out of every 6 pounds of the country's total catch each year

Absolute essential is keeping fish cold from the time it is caught until it is prepared for the table. Marks of fresh whole fish are: flesh, firm and rigid; eyes, bright not sunken; gills, free from discoloration or suspicious odor; scales, clinging to skin

Fish which is frozen and kept in cold storage remains in good condition for months. New quick-freezing processes give the best results in retaining flavor, but effective distributive equipment is still lacking in many places to deliver such fish to consumers in perfect shape.

A new method of marketing fish—fresh and frozen—has been developed during the past 10 years with the sale of fillets and steaks in package form. The use of fillets seems to be on the increase. The entire piece the consumer buys can be eaten; there is no scaling, gutting, or cleaning to be done. For dealers, shipping weight of the fish is reduced. The waste, which is usually about 50 percent of the whole fish, remains in the hands of the producer, who can use it for the production of meal and oil.

To vary the menu and save money, Bureau of Fisheries experts say: Look to some of the less common varieties of fish, instead of the relatively higher-priced staple sea products. Local fish markets along the coasts, and often inland, offer many varieties. Hake and mackerel, red snapper and grouper, channel bass and California sardine (pilchard), crab along the South Atlantic coast, and the burbot of the Great Lakes, are a few that beckon to the enterprising and thrifty housewife. But she should not rely upon any single way of preparing all these fish, for individual flavors call for different recipes. Boiling, baking, frying, broiling, scallops and chowders, are some of the possibilities; it all depends upon the fish and the family's taste.

For details on how to buy fish and shellfish and on easy ways in which to prepare them, consumers may get the U. S. Bureau of Fisheries Circular No. 19, "Practical Fish Cookery," and Circular No. 21, "The Story of Oysters," with 35 recipes. (Five cents each from the Superintendent of Documents, Washington, D. C.)

Helpful shorter bulletins which may be had, free of charge, from the U. S. Bureau of Fisheries, Washington, D. C., include "Look to the Sea for Your Diet"; "Nutritive Value of Marine Products"; and a food chart, "Fish and Shellfish for Food."

Many essential nutritional elements are provided by fish and shellfish: protein; fat (in certain fishes); Vitamins A, B, D, and G; minerals in quantity and variety. Flesh of most of the commonly eaten fish—halibut, cod, whitefish, salmon, trout, pickerel, and perch—averages from 15 to 18 percent protein.

Fat fish, in which the fat content is above 10 percent of the edible portion, include fresh salmon, butterfish, catfish, Columbia River smelt (eulachon), trout, turbot, and, at certain times of the year, shad; and canned sardines (in oil), tuna, and Sockeye, Chinook, and Atlantic salmon.

Mineral nutrients in sea foods and fish include calcium, phosphorus, copper, sulphur, iron, and—chiefly in saltwater fish and shellfish—iodine.

Fish liver oils, especially cod and halibut, have recently come into prominence as sources of Vitamins A and D to combat the "deficiency diseases."

Experts say that each person in this country eats about 13 pounds of fish each year. But nationwide averages mean little, when we know that people in New York City get about 32 pounds of fish per person per year and people in inland cities average much less. In St. Louis, for instance, the average is only 9 pounds; in Louisville, Kentucky, 6 pounds per year. Within a city, too, there are large differences in the amounts of fish eaten by individual families. Except in fishing communities, low income families do not generally enjoy much fish because the food dollar has to go first for foods highest in energy value, without regard to the "protective" value of fish proteins, minerals, vitamins.

America rates low in the list of fish-consuming countries. Japan has the highest figure with 55 pounds of fish and shellfish per person. Then come Sweden with 52 pounds a year; Norway, with 44; Denmark, 39; Portugal, 37; England and Wales, 35.

Fish consumption, according to many authorities, may increase in this country during the years ahead of us. But it is not likely to reach any such figure as that for Japan, the Scandinavian countries, or England. In these countries grazing and crop areas are limited, while fresh sea products are available at all times to people anywhere in the country's small area.

Large quantities of fish are caught by local fishermen and consumed without passing into the customary channels of trade, so that figuring out how much we catch each year is difficult. For the United States and Alaska, most recent estimates by the U. S. Bureau of Fisheries place the year's catch of fish and shellfish at over 4 billion pounds, worth 80 million dollars to 125,000 commercial fishermen. About three-fourths of the catch is sold for human consumption; the rest goes into by-products.

Canned fishery products amounted in 1936 to 795 million pounds, valued at almost 95 million dollars. Varieties, in order of value of the pack, were: salmon, far in the lead; tuna; sardines; shrimp; mackerel; clams; oysters.

Packaged fish, in the form of fillets and steaks and shellfish (fresh and frozen) in 1935 were valued at 25 million dollars; cured fish products were worth 15½ million dollars.

Fishery by-products manufactured in 1936 were valued at almost 35 million dollars. Most important were fish oil, used chiefly for soap; and fish meal for animal and poultry feed and fertilizer.

Pioneering days are over in agriculture and forestry; the fisherman remains in many ways our last frontiersman. He is still engaged in hand-to-hand combat with nature. Despite the introduction of power vessels, hundreds of sailing vessels still go out of our ports each month to battle the elements in search of a living from the uncertain seas.

Division of the proceeds of the catch is still by shares. Only hired men in the fleet are the cooks. The other men, the captain, and the vessel itself, work on a share basis. The wage system has penetrated the fishing industry only in small part.

Farmers of the sea, fishermen find that individual effort does not count for much when seasons and storms on the one side, and marketing and financing practices on the other, cut off their nominal independence. Fish may pass through the hands of four or five middlemen on its way from the producer to the consumer. In these arrangements, says a Fisheries Bureau expert, the fisherman "has no control and less legal protection than is afforded the farmer in the marketing of farm products."

Difficulties in obtaining needed credit for current operations are enhanced by the fact that ships and floating equipment are not considered good collateral, in commercial banking. The fisherman depends on outside financing from local wholesale shippers, wholesale receivers, commission merchants, and producers; often he rents his boat from a canner; and he must sell where he gets his financing. Testimony before the House of Representatives Committee on Merchant Marine and Fisheries last year by a Department of Commerce economist declared that "just so long as the fisherman is unable to exercise freedom to sell his fish to the best advantage—just so long will we fail to merchandise fish in an orderly manner."

The livelihood of the men who catch fish is at the mercy not only of seasons, weather, and their creditors on land. Almost all fish—and fishermen—must compete with each other for the consumer's food dollar, since consumers may readily substitute one variety for another. Many kinds of fish, especially certain edible species such as the cod and mackerel, move in "runs" or "schools." They must be caught when they are found and where they are found. As a result, there are frequent gluts on the market when large catches are brought in. Prices then drop to the fisherman, but not, as a rule, in the same degree to the consumer. On the other hand, "any enhancement in the price of fish occurs after the fish has passed out of the fisherman's hands." Concentration of demand for fish around the end of each week makes these price drops to the fisherman even sharper.

To offset the unpredictable workings of supply and demand, cooperative production and marketing have been attempted, as in agriculture, although to a somewhat smaller extent. Some 130 fishermen's cooperative associations were recently recorded by the Bureau of Fisheries. Fifty-four associations selling fish and buying supplies for their members, did over 9 million dollars' worth of business in 1935. Members and crews of these associations numbered 12,500 fishermen. Investment in boats by members amounted to $20,700,000; investment in fishing gear was about $3,600,000. The Pacific Coast has seen chief development of these cooperative associations; others operate in the Atlantic and Great Lakes fisheries.

[Continued on page 18]

Hands on the Bottleneck

Economic scouts penetrate into the mystery zone of milk distribution and emerge with new facts about the handlers of this essential food on its way from producers to consumers*

NEAPOLITAN milk consumers who get their milk warm from goats that walk into their kitchens need never bother themselves about distribution problems. There the economics of distribution are ideally simplified into a triangle, goat, goat-owner, and consumer. And unless the goat eats the money the consumer pays, the goat owner gets it, and no economists need go hunting up and down the country tracking down pennies in the consumer's dollar.

American city consumers, however, never see the cow whose milk they drink, they don't know the owner of the cow, and as for the consumer's dollar it takes an economic Sherlock Holmes to find out who gets it.

Instead of a goat in his kitchen, the American consumer has a corporation on his doorstep. A goat can be seen, smelled, and touched, but a corporation is intangible; it has neither shape, smell, nor touchable substance. Anyone can describe a goat, but describing a corporation is a job for a trained economist. Federal Trade Commission economists have recently described a few of the corporations in the business of milk.

America's biggest milk corporation is said not to handle a drop of milk, though its subsidiaries are important handlers not only of fluid milk but also of cheese, ice cream, and other milk products. This No. 1 milk corporation of America got where it is today chiefly by purchasing 331 separate dairy companies. Through these companies it sometimes acquired control of other companies. In one case the purchase of one dairy company brought control of 50 others. Besides the 331 dairy companies it also purchased or organized other companies to operate its cold storage plants, to advertise its products, and to run its trucks and tank cars. Beginning with 2 companies in 1923 milk corporation No. 1 started to grow immediately; it bought 9 companies in 1924, 31 in 1925, 6 in 1926, and 4 in 1927. Suddenly in 1928 its arm reached out and gathered in 62 companies; 98 were added in 1929. 81 in 1930, and then, its grasp less reaching, it added unto itself only 23 in 1932, and 11 in 1933. Consumers buy milk with money. They put down from 9 to 16 cents

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Earlier sections of this series, "Milk for Millions," appeared in the August 9, August 23, September 6, October 18, November 1, and November 15, 1937, issues of CONSUMERS' GUIDE.

on the grocer's counter, receive a quart of milk in exchange and the sale is complete. But corporations approach the problem of buying and selling each other differently. For instance, milk corporation No. 1 purchased most of its 331 dairy companies by exchanging its common stock for the stock of the companies it wanted to buy. The owner of a dairy company would turn over his company to the No. 1 milk corporation together with a promise not to engage in the dairy business again. In return for this he would receive a block of stock in the No. 1 milk corporation and a job running his own dairy company at a salary of anywhere from 5 to 50 thousand dollars a year.

Piling up companies like this results in piling up power in the milk business. By these methods the No. 1 milk corporation acquired control by 1934 of 21 percent of all the ice cream sold in the United States. But that is only part of the story. Control of almost one-fourth of all the ice cream in the United States meant that in Connecticut and Vermont the No. 1 milk corporation controlled 50 percent of ice cream sold, 40 percent of the ice cream in Maine, New Jersey, North Carolina, Virginia, and the District of Columbia.

Consumers in Kentucky, Massachusetts, Michigan, New Hampshire, Pennsylvania, and Tennessee bought 30 percent of their ice cream from the No. 1 milk corporation, and one-fifth of all the ice cream sold in New York, Ohio, Illinois, and Wisconsin came from this company. Milk corporation No. 1 sold ice cream in 27 States altogether.

Cheese, most highly concentrated of foods, is also the most highly concentrated economically. One-third of all the cheese sold in the United States in 1934 was marketed by the No. 1 milk corporation.

Almost 10 percent of all the milk sold by farmers in the United States passes through the bottleneck of the No. 1 milk corporation for sale to consumers as fluid milk and milk in manufactured products. In 1932, 42 percent of milk sold at wholesale in the District of Columbia and Baltimore milksheds flowed through this corporate bottleneck; 33 percent of the South Atlantic producer sales of milk was channeled through this same bottleneck; and 25 percent of Alabama's wholesale supply. Twenty percent of the milk in Ohio and Michigan flowed the same way and 18 percent of the milk in the North Atlantic States passed through the same channel. This company in 1935 had total net sales of 290 million dollars.

Milk bottleneck No. 2, the second largest dairy company in the United States, sold 230 million dollars worth of milk and milk products in 1935. Like No. 1 milk corporation, No. 2 got large by buying up other companies. From 1928 to 1932 this company purchased 207 separate companies, 186 in the United States and 21 in foreign countries.

Two companies, however, do not tell the whole story. Federal Trade Commission experts looking for bottlenecks examined the whole dairy industry. Surprising fact uncovered was that after the two largest milk companies, the largest buyers and sellers of milk were meat packers. Two meat packers are among the first 5 milk processors in America. In the order of the amount of milk they use, the 2 largest dairy companies rank first and second; then come 2 meat packers ranking third and fourth, with a creamery company ranking No. 5. Together these 5 companies purchased 29 percent of the total commercial milk in the United States in 1934.

Control of sales of fluid milk is still relatively weak for the whole country, though a low average for the entire country may mean startlingly high control of particular areas. One-sixth of the 30 billion pounds of fluid milk used in 1934 passed through 3 large dairy companies. Gauge readings climb higher when we get to butter. One-third of all American butter came to market through channels dominated by 6 companies—3 large butter manufacturers, and 3 meat packers. More than one-half of the condensed and evaporated milk passed through 6 companies—3 large evaporated milk companies and 3 meat packers—to get to market. Of cheese the Federal Trade Commission says: "Three large companies could act together and set the price of cheese in this country." Four-fifths of all the cheese sold in this country must slip through the narrow commercial passageway afforded by the 6 largest companies selling cheese, 3 of them dairy companies and 3 meat packers.

Channels of distribution are what the Federal Trade Commission economists call the paths commodities follow on their way from farmer to consumer. Working toward both ends from the middle, Federal Trade Commission experts found out that 6 meat packers and 12 dairy companies purchased from farmers 10½ billion pounds of fluid milk in 1934—about one-third of all fluid milk that got into commerce. Of this, 45 percent was purchased from farmers through farmers' cooperatives, 54 percent was purchased directly from the farmers themselves.

Going in the other direction the Commission learned that 64 percent of the milk handled by a selected group of corporations was sold to consumers and independent collectors, 15 percent went to processors, 7 percent to wholesale grocers, 6 percent to other distributors, and 5 percent to chain stores.

Butter figures shape up rather differently. Eleven dairy companies and 10 meat packers sold 796 million pounds of butter in 1934—almost half the total production. Chief source of supply was from small butter processors, independent creameries; 47 percent of all butter passed that way. Next most important source for the supply of butter was the farmers' cooperatives; 24 percent of the butter came this way. Then in order came: from brokers, 18 percent and from wholesalers, 10 percent.

Most butter on leaving the warehouses of selected companies either went directly to consumers or to independent retailers who then sold the butter to consumers. This accounted for 55 percent of sales; next in importance were the chain stores which took 16 percent. Wholesalers and brokers took the rest.

Cheese supplies for 8 milk companies and 10 meat packers came in greatest quantity from assemblers, companies that bought cheese from small cheese plants and then resold it to the 18 companies. Forty-five percent of milk reached the 18 companies this way: 41 percent of the cheese supplies for these companies were purchased directly from processors, and 13 percent from cooperatives. Sixty-one percent of cheese moving to market went to independent retail stores and consumers, 12 percent to chain stores, and the remainder to other companies for resale.

Condensed and evaporated milk followed a path distinct from any of those traced. Ninety-nine percent of all the canned milk purchased by 3 dairy companies and 4 meat packers came from processing companies. Chief outlet for canned milk was through wholesale grocery companies. Forty-five percent of the sales of 6 dairy companies and 3 cooperative condenseries went that way; 11 percent went to chain stores; 28 percent to retail and to consumers. About 5 percent was sold to Government agencies, State, city, county, and Federal.

Some chain store systems manufacture their own condensed milk and sell that and other brands. Six chain store companies, the Commission estimates, sold 22 percent of all the canned milk in 1934. One chain sold more than 15 percent of the canned milk sold in 1934.

Squirrels run in a wire treadmill, never get anywhere, yet seem to be perfectly happy. But corporations don't go bargaining all over the country for milk companies just to be going places and killing time; they are in search of profits. Whether or not they have been successful rests upon the interpretation of these and other figures. Federal Trade Commission experts estimate that the annual average return on the stockholders' investment in 10 milk processing and distributing companies was 10.25 percent for the years from 1929 to 1934. Worst year was 1933 when profits slumped down to 4 percent on the stockholders' investment; best year was 1929 when profits soared to 17 percent on the stockholders' investment.

Comparing the incomes of the milk distributors and processors with the incomes of other economic groups is a good way to measure their relative economic power. By this test milk distributors came off fairly well. Letting 1929 income figures stand for 100 percent, distributors' sales climbed up to 111 in 1930, then fell off to 94 in 1931, slipped further to 72 in 1932, hit bottom with 65 in 1933, and then came back in 1934 to 75.

Farmers, not so fortunate, began with their gross incomes from the production of milk at 100 in 1929, saw them fall to 87 in 1930 when distributors' incomes went up, watched them drop further to 69 in 1931, hit bottom with a thud at 54 in 1932, hold there for 1933, and then recover to 63 in 1934.

Chain stores and wholesale grocers did better than farmers in every year, but compared with the milk companies, made more in bad years, less in good years.

Consumers' dollars in the end pay for both processors' and farmers' shares. Looking at the fluid milk dollar the Federal Trade Commission discovered that in 1934 when the average price of milk per quart in 51 cities was 11.04 cents, 5.83 cents went to the producer, 5.21 cents went to the processor for his services. Here then 53 cents of the consumer's dollar went to the producer to pay for the cost of producing the milk and transporting it to the distributor's plant while 47 cents went to the distributor for processing, bottling, and distributing the milk.

Butter dollars in 1934 were distributed three ways: 25.6 cents to the distributor, 15.8 cents to the processor, and 58.6 cents to the producer. Average retail price for butter in 51 cities in 1934 was 31.5 cents a pound. On this basis, producers got 18.45 cents, processors 5 cents, and distributors, 8.05 cents.

Chain store sales of butter were studied in two instances for the same period, and though they are not comparable with the above analysis, they are interesting. Average price of butter per pound was 27.68 cents. Of this 2.44 cents went to the distributors, 6.79 cents to the processor, and 18.45 cents to the producer. On a butter dollar basis, this means that for this chain store butter, producers got 67 cents of the consumer's butter dollar; processors got 24 cents; and distributors 9 cents.

Arithmetic books used to carry a dozen or so pages of answers to problems posed. Good economic studies should also have answers after all the problems are set forth. Properly the Federal Trade Commission not only poses problems; it also draws conclusions and makes recommendations.

Concludes the Federal Trade Commission: The price of cheese, which is a considerable factor in the price of milk, is not determined competitively.

Dairy products concerns sometimes use corporate control of a market to depress fluid milk prices to farmers. "Such practices," the Commission adds, "are detrimental to the interests of dairy farmers and are inimical to the interests of the consuming public."

Secret rebates and special discounts have been granted by the large milk distributors to favored customers, particularly chain stores.

To Congress, and producers, the Commission says: "It is believed that conditions . . . can be improved without additional legislation . . . if producers take full advantage of existing Federal and State Laws authorizing the organization of cooperative associations to market farm products."

Prevent distributors from creating surpluses and depressing milk prices, the Commission recommends to farmers, by giving "careful consideration to the plan of organizing inter-marketing area agencies to handle interstate and inter-milkshed sales of milk and cream."

Use written contracts, it advises cooperatives. States should require milk distributors to make complete reports of their activities, and the Federal Government should require distributors who engage in interstate commerce to make similar complete reports.

Purchase of milk companies by other milk companies could be corrected by amending the Clayton Anti-Trust Law.

Federal support should be given to compacts between States to secure uniform laws in regard to milk.

AN OUNCE OF PREVENTION

[Concluded from page 9]

second consists of 2 pounds, 1⅓ ounces of diammonium phosphate mixed with a gallon of water, while the third can be made just as easily by dissolving 12½ ounces each of ammonium sulphate and diammonium phosphate in a gallon of water. When fertilizer-grade ammonium phosphate is used, the solution should be strained to remove dirt and debris. Chemists also recommend that in the first of these three solutions, enough household ammonia be added so that its presence can be detected by its odor. The ammonia neutralizes any free acid and temporarily prevents deterioration of the solution through escape of the acid.

For the usual household purposes there is nothing better than the boric acid-borax mixture. Not only does this formula fireproof the materials to which it is applied, it is a double check against deterioration of curtains and other fabrics exposed to invisible acidic gases in the air. No fabric escapes the destructive sulphuric acid contained in the gases; the acid is the death knell for cotton and silk alike. It shows no favorites. Research chemists in the Bureau of Chemistry and Soils of the Department of Agriculture conducted extensive tests on fabrics treated with the borate solution and emerged with another boost for the fireproofing method. They discovered that the action of the acidic sulphur gases was almost completely checked for a considerable period of time by the borate treatment. And to top off their revelations, they announced that the borate treatment has no effect whatsoever on the appearance of the fireproofed fabrics.

Other arguments in favor of the borate solution method stand out. The Bureau of Chemistry and Soils has outlined in a bulletin* the qualities of a desirable fireproofing treatment, all of which are met by the boric acid-borax mixture. The treatments should be easy to apply, should require little equipment, and should use easily obtainable materials. If the amount of the agent required weighs more than 40 percent of the weight of the fabric or other material to be fireproofed, it is not a desirable fireproofing agent. In fact, the Bureau recommends that the agent should not exceed by more than 20 percent the weight of the material to be fireproofed.

Finally, this Bureau lays down 5 essential rules for using any type of fireproofing method: (1) the fireproofing material should not shorten the life of the article on which it is used; (2) it should exert little or no effect on the appearance and feel of the article treated; (3) it should have no effect on color; (4) it should be stable, noncorrosive, noncaustic and non-poisonous; and (5) it should not take up water, should adhere well, should be cheap and should impart satisfactory fire resistance.

There is but a single failing chalked up against the virtues of fireproofing: No fireproofing agent will prevent a fabric from being charred and showing the effects of burning. But one which is applied correctly will halt the blaze and prevent the flames from spreading. That is the fundamental purpose of fireproofing for safety and for eliminating fire hazards. The wise housewife knows she is protecting her home and her family when she takes these preventive steps against the ever present danger of fire and disaster.

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*"*Fireproofing Fabrics,*" *Farmers Bulletin No. 1786. Priced at five cents and for sale by the Superintendent of Documents, Washington, D. C.*

BREAD BASKET PROBLEMS

[Continued from page 6]

vators in order to secure freight business. Through owning the elevators where grain was stored, railroads assured themselves of the privilege of hauling the grain when it was finally delivered to mills. Today, however, most of the elevators built by railroads have been leased to large handlers of grain, though elevators in export points are still retained by the railroad companies. Such leases are frequently at rentals much below the actual cost to the railroad companies of maintaining the elevators.

One effect of such a practice is to add to railroad charges a cost which should be legitimately charged against the marketing of grain. A more important effect is the fact that large shippers of grain tend to be favored over small shippers of grain. Operators leasing railroad-owned elevators can undersell independent grain dealers. Too, the practice of leasing elevators at rentals below their actual cost, discourages the building of other elevators and thus reduces competition.

In some of the more important grain markets the available storage capacity is controlled by a small number of grain men. Theoretically grain storage is available to the public as well as to the owners of these elevators, but prices for storage to non-owners make the use of the elevators impossible in many cases.

An example of what can happen when warehouse operators are permitted to store grain they own in bins where publicly owned grain is stored: Suppose there are one thousand bushels of publicly owned No. 2 grain stored in the bins of a particular warehouse. Now within each grade, quality ranges from the top of the grade to the bottom of the grade. If the No. 2 grain is of high quality then the warehouse owner might mix with the thousand bushels of No. 2 grain 200 bushels of No. 3 grain that belongs to him and thus obtain 1200 bushels of low grade No. 2 grain. By this process he has transformed 200 bushels of No. 3 grain into 200 bushels of No. 2 grain, has profited to the extent of the difference in price between No. 2 and No. 3 grain at the expense of the owners of the grain that is stored in his warehouse.

Once before the Federal Trade Commission investigated the grain markets, then it recommended that grain dealers who did not operate elevators should be enabled by practical measures to store grain in public elevators. Or that railroads might be required to operate their elevators for their shippers. If these suggestions did not work, it was recommended then that the State or Federal Government should build and operate public elevators in the public interest.

Today the Federal Trade Commission says, "After the lapse of many years there has been little or no improvement in the situations which led to the foregoing recommendations."

To bring these recommendations up to date, it now adds, however, that all deliveries of grain should be made from warehouses licensed by Federal Authority, subject to Federal Control. Nor should these elevators be "owned, operated, or controlled, directly or indirectly, by any person, firm, or other organization, directly or indirectly, dealing in grain." All deliveries of grain on futures contracts should, in the opinion of the Commission, be subjected to Federal grading and inspection. Storage charges for grain in public warehouses should be regulated by the Federal Authority. Futures contracts for the delivery of grain under the Federal Trade Commission recommendations could be satisfied by the delivery of grain at places other than Chicago as well as in Chicago. Railroads would themselves be required to operate their elevators at rates fixed by the Interstate Commerce Commission. Brokers and other persons who buy and sell grain for the accounts of other persons would be prohibited from buying and selling grain for their own account. Then, says the Federal Trade Commission, "If these recommendations do not prove sufficient, the only alternative would appear to be to operate all elevator capacity by public authority." On existing laws, comments the Federal Trade Commission, "A careful examination of the Commodities Exchange Act indicates that its provisions do not reach to the heart of some of the chief problems existing in the grain trade."

(To be continued in our next issue)

FISH ON YOUR DIET

[Continued from page 13]

Independent boat owners are in the best position to join cooperatives; others cannot well use the cooperative method. "Independent" fishermen are those who operate their own boats, nets, and other gear. "Dependent" fishermen are those who operate craft and gear belonging to wholesale dealers, canners, or others.

Unlike farm cooperatives, the fishermen's cooperative associations have received scant attention from the Government. No money is available for loans to them except in the case of oyster planters who have received some loans from the Farm Credit Administration. A proposed Fishery Credit Act, on which hearings were held at the last session of Congress, would make available some $5,000,000 as working capital for cooperative associations. Only form of recognition fishermen's co-ops have had is the Act of 1935 "authorizing associations of producers of aquatic products," which gave Federal authorization to fishermen's cooperative marketing enterprises engaged in interstate and foreign commerce. This law is comparable to the Capper-Volstead Act of 1922 by which Congress gave Federal authorization to farm producers to associate and market their products.

In the spacious new Department of Commerce building in Washington, sightseers and Government employees crowd about the 53 aquaria and pools which give tangible and arresting evidence of the work of the U. S. Bureau of Fisheries.

The Bureau, which is part of the Commerce Department, is charged with the conservation, under Federal laws and international treaties, of our existing supply of fish and shellfish. Thus it regulates Alaska salmon fisheries; distributes billions of eggs and fish from Federal hatcheries for food and game fishing; collects statistics of the fisheries industry; studies marketing problems; investigates pollution of fresh water streams; carries on research in the preservation of fishery products, the nutritive value of fish for human food and animal and poultry feed, and methods of preparing fish and shellfish for the table.

Protecting purity of fish and shellfish — fresh or processed — shipped across State lines is a responsibility of the Food and Drug Administration, under its general mandate to stop the interstate shipment of adulterated or misbranded food products. See "On Guard for Consumers" in the Consumers' Guide for November 29, 1937.

Local public health ordinances and State laws of greatly varying degrees of effectiveness govern the marketing of fish and shellfish within local communities.

Purity of oyster beds is guarded by special regulations administered by the United States Public Health Service.

Fish meals and oil sold as animal or poultry feed are subject to commercial feedstuffs inspection by the various States.

No Federal fish inspection exists comparable to the Federal inspection of meat in slaughterhouses, packing houses, and canning establishments by the Bureau of Animal Industry. For canned fish and sea food, inspection is possible, on a purely voluntary basis. The Sea Food amendment to the Federal Food and Drugs Act, sponsored by shrimp canners in 1934 to revive declining consumer confidence and sales, allows canners to secure Federal inspectors to supervise packing operations and insure a sanitary product. Practically all shrimp canners now have inspectors on their boats and in their canneries. Inspected products are labeled "Production Supervised by U. S. Food and Drug Administration." As yet, no packers of other sea foods have asked for such Federal inspection. See "What Kind of Safeguards?" in Consumers' Guide, April 19, 1937, pp. 16–17, for details of this service.

There are no Federal quality grades for canned fish such as the grades for canned fruits and vegetables administered by the Bureau of Agricultural Economics.

Proposals for grading of fish were made by fisheries technologists, designedly in the interests of fishermen and consumers and the industry as a whole, at the NRA hearings on the fisheries code, but did not secure acceptance. The States of Minnesota and Virginia require grading of certain fisheries products sold within their borders. Consumer groups in other States who wish information on buying fish by grade may write to the Director of the State Division of Markets, Richmond, Virginia; or the State Department of Markets, St. Paul, Minnesota.

STUDY QUESTIONS FOR THIS ISSUE

1. Why has the Food and Drug Administration defined minimum ingredients for mayonnaise but not for salad dressing?
2. How important to farmers is the production of wheat?
3. What are the principal kinds of wheat and what are the major uses of the flour that comes from each kind?
4. How did the opportunity for speculation in the sale of wheat develop?
5. What does "hedging" mean and what is the economic reason for it?
6. What curb to trading in grain does the Federal Trade Commission suggest?
7. What changes in the ownership of elevators does the Federal Trade Commission suggest?
8. How can you make a simple fireproofing solution for fabrics?
9. How should it be applied to be effective?
10. What kinds of household objects should be fireproofed with such a solution?
11. What food values are provided by fish?
12. What pointers have you learned for use in selecting fresh fish?
13. What are some of the reasons why fishermen are in a weak economic position?
14. How are fishermen trying to strengthen their position?
15. What kinds of legal protections exist to protect consumers against impure fish and fish products?
16. How important is the No. 1 milk corporation in the purchase of milk from farmers, according to the Federal Trade Commission?
17. How important, according to the same source, is this company in the sale of ice cream and cheese?
18. How many companies, is it claimed, purchase about one-third of all the fluid milk sold by farmers?
19. How did the average returns on investments in 10 milk companies compare during the depression with incomes of dairy farmers as a whole?
20. Where did the consumers' fluid milk dollar go in 1934?
21. What are 3 of the suggestions the Federal Trade Commission makes on curing some of the problems of milk distribution?

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Economic scouts penetrate into the mystery zone of milk distribution and emerge with new facts about the handlers of this essential food on its way from producers to consumers.

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CONSUMERS' Guide

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VITAMINS IN FISH OILS

CONSUMERS' Guide

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BRIEFS: In 15 schools, Los Angeles' Adult Education Section of the city school system is conducting courses in consumer problems. Six certified teachers are conducting these classes. Posing the question: "Do we buy, or are we sold?", the courses offered propose to teach how to spend with a plan and buy with informed judgment. . . . Consumers' Counsel Division has a card file of more than 300 schools which are doing some type of consumer education work. . . . Canned dog foods sold in Kentucky now must meet State requirements: A minimum of 10 percent protein and 2 percent of fat, and a maximum of 1½ percent of fiber and 74 percent water. (See CONSUMERS' GUIDE, Jan. 17, 1938.) This regulation became effective January 1. . . . Nutrition specialists in Connecticut, queried frequently as to "Why does the doctor specify that the baby be given commercially-canned tomato juice, instead of home-canned tomato juice?" set to work comparing the Vitamin C content of both, found miscellaneous lots of Connecticut home-grown and home-canned tomatoes rated as well in Vitamin C as a good grade of the commercially-canned kind. . . . At least one large manufacturer of ribbons has joined the procession of fabric manufacturers in labeling his product with its fiber content. . . . A history teacher we know put this question to her fifth grade class: "How will the meat we have for our Thanksgiving feast differ from that the Pilgrims and Indians had for theirs?" One small consumer in her class replied: "Why, ours will have a purple stamp!" For any adult consumers who haven't yet caught up with this small one, we recommend, "Under the Round Purple Stamp" in our February 8, 1937 issue, and then, "Meat Grades at Your Service," October 18, 1937. . . . "Let the Buyer Beware" used to be a comfortable rule of commercial behavior. Now an editorial in a prominent trade journal reverses the rule and says, "Let the Seller Beware," adding, "That the acceptance of higher ethical standards will be required of business in the future is indicated by the recent campaign of the Federal Trade Commission. . . . The Commission is taking the consumers' crusade seriously, and it is to be hoped that business will."

A LARGE proportion of the huge sums spent by apartment houses, hotels, hospitals, and business establishments for pest control is for one insect—the cockroach, according to records in the Bureau of Entomology and Plant Quarantine. Thousands of dollars also are spent each year to fight cockroaches in the home.

Where the cockroach hides is the key to his control, Bureau entomologists report. Cockroaches are nocturnal. They hide in large numbers during the day—in the home usually in the kitchen near the sink, around cabinets, behind radiators, and under baseboards or the trim on doors and windows. If a light is turned on suddenly, at night, when the roaches are feeding, they reveal their hiding places by running for them.

These are the places to treat by dusting with sodium fluoride powder or pyrethrum powder. Before applying the powder, as many openings as possible should be closed with a crack filler, such as putty, plastic wood, or plaster of paris.

Sodium fluoride powder, the best all-around cockroach remedy, is poisonous to man if taken internally in sufficient amounts and should be kept out of food and away from children and pets. It is blown into the hiding places with a small duster or with a modern electric powder duster, or it can be sprinkled by hand where roaches run most frequently.

Because cockroaches develop slowly and can exist for some time with little or no food, they usually may be found in all stages of growth.

GOVERNMENT graded meats are "at least 50 percent responsible for the success of our meat market," the manager of Consumers' Cooperative Services of Chicago reports. "The market has a reputation all over the city among cooperators, and of all the advantages of the store the reliable quality of the meat is cited most often by customers.

"In addition we have found that this grading service is a very important protection in buying—very frequently a carcass has been selected by us or by the commission house as equal to the government grade Choice and on this understanding ordered to be graded and then sent out, only to be *rejected* by the grader as not up to grade. This indicates that the commission house can fool our butcher occasionally but not the government grader."

Consumer organizations in New York City are pressing on their city council to enact a meat-grading ordinance which would make compulsory the grading of all meat sold in that city. Many retailers, too, are joining in this demand.

If you missed our October 18, 1937, issue in which "Mrs. Blank's butcher gives her some pointers" on meat grades, send for our reprint of this story.

Vitamins in Fish Oils

Facts for buyers of vitamin values

"This is the time of year when parents are very much interested in the use of cod-liver oil preparations for their children," a Colorado Extension Service worker writes us. A supervisor of boys' and girls' 4-H clubs, he tells us of difficulties "we are up against in the purchasing of cod-liver oil," and urges that the Consumers' Guide give consumers a hand.

Cod-liver oil has been prescribed for children since the time of Hippocrates, Greek physician whose oath to serve humanity still is taken by our medical school graduates. Hippocrates knew cod-liver oil helped children. But—2300 years ago—he did not know just why. Neither did the editors of British Pharmacopoeia, when in 1771 they listed cod-liver oil for the first time. Nor, surely, did the two enterprising Yankees who in San Francisco in 1865 were marketing "Dr. Fisherman's Lotion for Man and Beast" and "Okhotsk Sea Cod Liver Oil."

That remained to be worked out by twentieth century scientists, who have explained the contribution of cod-liver oil. It is a food rich in two vitamins, A and D. For the story of the discovery and importance of Vitamin A, readers may consult "Young Consumers," in the Consumers' Guide of April 20, 1936; for Vitamin D, "On the Trail of Vitamin Values," in the Guide of June 29, 1936.

Trading in vitamins has become big business. Consumption of cod-liver oil alone in this country jumped from 2 million gallons in 1926 to 6 million in 1936. (This includes animal and poultry feeds.) Imports, chiefly from Norway, accounted for over nine-tenths of these 6 million gallons. Wholesale values of vitamin products produced in this country reached a total of some 16 million dollars' worth in 1935.

Odor and flavor of cod-liver oil, unpleasant to many adults, are pleasant to most children. This oil or another rich source of Vitamin D is on the "must" list for children up to 2 years of age

Drug stores experienced their greatest boom in the vitamin business, it is reported, between 1930 and 1935. Since then, while sales have increased, stores report a slackening in the rate of increase. One trade authority estimates that vitamin products have been running third in drug store sales, topped only by laxatives and cold remedies.

Vitamins we know chiefly by what happens when we don't get enough of them. If children fail to get sufficient Vitamin A they begin to fall off in weight. They may develop forms of eye disease, such as night blindness and xerophthalmia. In night blindness, the eye is unable to adjust to twilight or semi-darkness. A more severe eye disease, related to it and due to lack of Vitamin A, is xerophthalmia.

Low resistance to infection is another consequence of lack of Vitamin A in the diet. Vitamin A is necessary for the healthy condition of the linings of nose, throat, ears, the intestinal tract and kidneys. It has been loosely called the "anti-infective" vitamin; lack of any of the vitamins leaves the body more susceptible to infections.

Vitamin D is sometimes called the "sunshine vitamin," because exposure to sunshine enables the body to manufacture its own Vitamin D. And it is the "antirachitic vitamin because children must have enough of it to prevent or to cure rickets. It must be present in the body if healthy bones and teeth are to be built. The minerals, calcium and phosphorus, essential ingredients in bone building, are not enough: To *mobilize* the phosphorus and *deposit* the calcium which build bones, the body requires Vitamin D.

Lack of Vitamin D shows itself in rickets. All too many cases of bowlegs, knock-knees, and pigeon-breasts bear testimony to the ravages of what is still the most common disease of children in the temperate zone. Milder cases of rickets can be detected by the X-ray. Rickets may be cured; but if they are allowed to go too far, the bones may show the effects for many years or even throughout life.

Rickets had long been observed to be most common among poor children. The discovery of Vitamin D settled one old scientific quarrel—whether rickets was due to poor diet or to slum housing. The answer was: both. Foods with Vitamin D value come high for the low-income family. Sunshine, the other great source for Vitamin D, comes seldom to slum homes.

Vitamin D is, moreover, one of the nutrients which children are likely not to get enough of, even with otherwise balanced meals. Cod-liver oil, or another rich source of Vitamin D, is on the "must" list for children up to 2 years of age. These are the years of greatest risk of rickets. Most experts say 2 to 3 teaspoonfuls of cod-liver oil a day are ample protection.

For older children, cod-liver oil requirements will vary, depending on the amount of sun they are getting in their homes and at play, and on the other foods they are eating. Winter means less sunshine, and sun which is not as effective as summer sun in the ultra-violet rays that form Vitamin D within the child's body. Clothing and ordinary window glass keep out most of the ultra-violet rays. In winter, then, and perhaps all year round, many youngsters—especially those of families on low incomes—will continue to require cod-liver oil.

Both sun baths and cod-liver oil are on the required list from the first month of life (when rickets may begin) to the end of the second year, say the child specialists of the U. S. Children's Bureau. "For the child from 2 to 6 years it is often advisable to continue giving cod-liver oil in winter, especially if he is living in a climate with little sunshine." (Expert advice in readable form on diet, sleep, clothing, play, and other problems of the young child are available in several Children's Bureau publications. "Infant Care" and "The Child from One to Six" can be ordered from the Superintendent of Documents, Washington, D. C. Prices, respectively, 10 and 15 cents. "Food for Children" and "Diets to Fit the Family Income," with discussion of Vitamins D and A, pp. 14, 22, may be had free of charge from the Bureau of Home Economics, Washington, D. C.)

"Vitamin conscious" adults have wondered how much of each vitamin they need, and how to get what they need most economically. We know somewhat more about adult requirements for Vitamin A than for any of the other vitamins. Yet even on Vitamin A, the experts differ.

For adults, ordinarily, a properly selected diet will afford an adequate supply of Vitamin A. "Those who have a limited amount of money to spend for food should be sure to include foods that will supply plenty of Vitamin A," caution the Bureau of Home Economics experts. Unfortunately for low income families, "energy foods" naturally get first call on the food budget, and both nutritional knowledge and shopping skill must be combined to get in the "protective" foods.

The body can store important quantities of Vitamin A. Foods which contain a liberal amount of Vitamin A include—in addition to cod-liver oil—milk, butter, and cream; whole milk or "cream" cheeses; eggs; yellow and green vegetables; liver.

Adults short on Vitamin A can get any desired quantity in cod-liver oil or other fish and fish liver oils, or in tablets or capsules. But experts still lack sufficient data on which to determine an adult dose of Vitamin A.

Vitamin D, like Vitamin A, can be stored in the body. Scientists still have no tangible evidence, they say, regarding the actual Vitamin D requirement for people after early childhood, except for pregnant and nursing mothers, who need extra-liberal allowances of Vitamin D to stand the strain of their own systems, and to make possible the development of healthy bones and teeth in their offspring. Cod-liver oil will supply that extra Vitamin D, for the prospective and the nursing mother.

Not many foods are rich in Vitamin D. Egg yolks, butter, cream, are Vitamin D sources which also offer Vitamin A. Salmon and sardines contain Vitamin D. In ordinary cow's milk the concentration of Vitamin D—never very high—depends upon the season of the year and the food the cows are getting. Milk may be "fortified" by giving cows feeds rich in Vitamin D; by enriching the milk with a Vitamin D concentrate; or by irradiating the milk. Such milk usually costs 1 cent a quart more than grade A milk. The added cent buys a potency of 400 Vitamin D units when milk is fortified by the first two methods, 135 units in irradiated milk. Cod-liver oil will generally offer a somewhat larger penny's worth in terms of Vitamin D potency; plus its Vitamin A value.

Evaporated milks similarly fortified are sold without an increase in price.

Exposure to sunshine enables the body to manufacture its own Vitamin D. This "sunshine" vitamin must be present if healthy bones and teeth are to be built

Research in vitamins goes forward almost daily. While vitamins are essential, scientists warn not to expect too much from them. The "anti-infective" Vitamin A, they claim, will not guarantee against infections, nor cure infections once contracted. While resistance to infection may be lowered when there is a serious deficiency of Vitamin A, there is no evidence whatsoever that it is possible to increase resistance to any infection by stuffing in Vitamin A. Most common infection at this season is the cold. Studies in resistance to colds do not yet prove that people who have been getting plenty of Vitamin A will get fewer colds. Nor will heavy doses of Vitamin A cure a cold.

In tooth formation and maintenance of normal tooth structure, Vitamin D plays an important part. But it does not itself take the place of calcium or phosphorus in forming the deposits of calcium phosphate in bones and teeth. Adequate Vitamin D intake will not insure normal tooth structure nor prevent dental caries. Final warning from the experts is that vitamin products should not be taken in advanced stages of disease except under a doctor's control because accompanying conditions make medical advice necessary.

Many claims are made for vitamins which have no solid scientific basis. Vitamins, say those experts who have none to sell, are not cure-alls.

You must have oil in the crankcase if you want your car to run; but the car won't run any better if it is overloaded with oil. A lack of vitamins may keep your body machine from working in good form, but an overdosing is sheer waste.

No corner on vitamin virtues can be claimed by cod-liver oil. Increasingly the trend is toward fortification of cod-liver oil with the liver oils of other fish, many of which are richer in Vitamins A and D. Halibut, burbot, swordfish, tuna, salmon, are a few whose oil is used. Halibut liver oil is well known in its own name. Increasingly cod-liver oil is being turned to animal and poultry feed, and the higher potency oils are being used for human food. U. S. Bureau of Fisheries chemists pioneered in showing possibilities of oils other than cod liver for human and poultry food.

Body oils of several fish—salmon, sardine, tuna—are good sources, too, of Vitamins A and D. American fisheries have great potentialities, still almost unexploited, for the production of fish liver and fish oils. Each year about one million gallons of salmon oil, for example, are produced as cannery waste, in packing the salmon harvest. The housewife should remember, when she opens a can of salmon, that the oil floating on top of the can is rich in Vitamin D. It fits well into most recipes which call for the salmon itself. If she pours the salmon oil down the sink, she may have to buy Vitamin D for her children at drug, not food, prices.

How to select wisely from the host of oils, flavored and unflavored, of capsules, tablets, and irradiated products, is a baffling problem for consumers. Convenience in taking, for many buyers, may justify paying more for one form than another. Preparation and packaging of capsules and tablets naturally add to costs. Relative costs, otherwise, must be figured in relative potency.

Cod-liver oils and other vitamin products differ greatly in vitamin potency. The fish used, the method of manufacture, the policy of the maker, care in the shipper's and druggist's hands, all contribute to the variations. A number of reputable manufacturers are known to maintain their own laboratories to assay vitamin potencies. Laboratory assays are expensive and time consuming. Smaller firms can either get commercial laboratories to do the assays or else make their products from vitamin concentrates sold to them with potencies guaranteed.

Vitamin potencies are measured in "units"—but these units are not like ounces or grams. A vitamin unit is the vitamin activity of a definite quantity of a standard preparation which has been adopted specifically to serve as a standard in vitamin determinations. Each of the known vitamins has its own units. A Vitamin D unit is entirely different from a Vitamin A unit. For Vitamins A and D we use the United States Pharmacopoeia (U.S.P.) units, which are in agreement with the international units adopted by an international committee on which American scientists serve. The "U.S.P.", compiled by the United States Pharmacopoeial Convention, sets forth formulas, standards of purity, and methods of preparation of common drugs and nonproprietary medicines currently used by physicians. The Convention is a body of outstanding scientists from the ranks of industry, colleges of pharmacy, and Government service.

Each gram of cod-liver oil, under U.S.P. standards, must have a minimum potency of 600 Vitamin A units and 85 Vitamin D units. A great deal of the cod-liver oil on the market has a much higher potency, especially in Vitamin A. The American Medical Association's "New and Nonofficial Remedies" sets minimum potency at 850 Vitamin A units and 85 Vitamin D units per gram.

First rule for buyers is: Know which vitamin or vitamins you need to buy, in addition to vitamins you are getting in your food. On this, a doctor or an expert in nutrition is the best counsellor. Many Vitamin D preparations, while effective in the prevention of rickets, do not have any of the Vitamin A value of cod-liver oil. There is no use paying for comparatively high value in

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The Drama of Wheat

Farmers do not regard grain marketing as an abstract academic problem. As early as 1857 a group of Wisconsin farmers set about straightening out the tangle of distribution directly by cooperation. Beginning with the local ownership of cooperative storage elevators, cooperation gradually developed to the point where in the marketing season of 1934–35 a national grain marketing association, made up of regional cooperatives, marketed more than 15 percent of the total commercial wheat crop. This association is now in process of being dissolved.

Grain cooperatives are of two kinds: local cooperatives the majority of which own local elevators; regional cooperatives located at terminal markets and serving local units in outlying territory, some of these have elevators. In 1936–37 local cooperatives had a total membership of nearly 400,000 farmers and did a business of about $390,000,000. Regional cooperatives did enough additional business to bring the total for all grain co-ops to $440,000,000 for the year.

Chapter 2 of "Bread Basket Problems," probed by Federal Trade Commission experts, culls more facts about the makers and handlers of some everyday foods*

**This is the sixth of a series of articles based on the Federal Trade Commission's inquiry into agricultural income. Earlier articles in the series appeared in our May 17, June 14, July 12, August 9, 1937, and January 31, 1938, issues.*

Milling is act III in the drama of wheat. The end of the marketing act finds wheat in the bins of millers. These various types are stored in separate bins, then mixed together in predetermined proportions to secure the kind of flour the miller desires. The wheat mixture is then cleaned, and tempered. Unlike the temperings of steel which are done to make the metal hard, wheat is tempered to make the inside of the kernel soft—but at the same time toughen the outer coat of bran. Then it is ready for actual milling.

Beginning with production, the Federal Trade Commission experts retraced their steps through the channels that wheat must follow to the consumer to find out if there were any narrow places held so tightly by any one corporation or by a group of corporations that tribute could be exacted of all the wheat that passed that way.

Rivulets of wheat flow from over 1,000,000 farmers to converge on a relatively few wheat middlemen. Fifteen wheat middlemen in 1934–35 purchased the equivalent of one-fourth the 1934 commercial wheat crop of 332,000,000 bushels of wheat. The three largest wheat middlemen bought quantities of wheat equivalent to 13 percent of the total 1934 commercial wheat crop. Largest single wheat middleman purchased the equivalent of 5 percent of the total wheat crop.

Channels narrow further by the time wheat becomes flour. Thirteen large milling companies milled the equivalent of 47 percent of the total flour produced in the country in 1934–35. Three largest milling companies sold 29 percent of the total flour sold in the United States in 1934–35, and the largest milling company sold 16 percent of the total flour in the same period.

Probing still further into the question of concentration and control, the Federal Trade Commission found there are four types of baking companies: wholesale bakeries; bakeries that sell directly to consumers through house to house distribution; bakeries owned by chain stores; and the once familiar retail bake shop. Of these, two have major economic importance today: the chain store bakery, and the wholesale bakery.

In 1933 about 8 billion pounds of bread were baked for commercial distribution. Ten of the largest bakeries sold slightly less than 31 out of every hundred of these 8 billion pounds of bread. The 3 largest bakery companies, one chain store bakery, and 2 wholesale bakeries, sold slightly less than one out of every 5 pounds of bread sold in 1933. The 3 largest chain store bakeries sold 8 percent of the total bread sold in 1933. Where once millions of women kneaded dough and baked bread in millions of homes, today doughkneading and breadbaking are gradually moving into larger and larger factories controlled by fewer and fewer companies.

To the question, how did these companies achieve their dominant position in the wheat industry, the Federal Trade Commission replies by giving case histories. Number 1 flour company, the one that milled

This vigorous grain cooperative at Kalispel, Montana, with some 400 members does a business of over $350,000 a year, selling not only wheat, but oats, rye, and barley, and buying farm implements, tires, gasoline, and groceries

Weight of the grain and other things influence milling qualities. Experts in the Bureau of Agricultural Economics are constantly studying ways to improve existing varieties and develop better ones

one out of every 6 barrels of flour milled in 1934 was created by the formation of a company to buy out 5 existing milling companies. Then it spread out over the field by buying other milling companies. In 1929 it bought 7 companies, 4 in Texas and 3 in Oklahoma. Then it purchased a company on the Pacific Coast which had 6 large mills there. Later it bought another company specializing in feed for cattle. Finally in 1933 it bought another general milling company. It now has offices in 71 cities in the United States proper, 2 offices in Hawaii, and a subsidiary operating in Canada.

Sometimes, however, individual companies in an industry, no one of which is dominant, meet and decide to act together to control prices and production. Suspecting just such a development in the flour industry, Congress authorized the Federal Trade Commission in 1924 to investigate. But before the investigation could get going the milling companies stopped the investigation by an injunction and delayed it until 1931 when the Commission finally had the injunction lifted.

From this investigation the Federal Trade Commission reported some observations. Large milling companies through a trade organization, it appeared, met together to control the milling business. By the use of a black list they kept wholesalers and distributors under their thumbs; through production agreements they restricted the production of flour; by establishing fixed charges for each process in flour milling they controlled and maintained uniform prices. All of these provisions the Commission discovered were incorporated in a Miller's Code of Ethics.

Bread began to concentrate in 1907 when 7 bakeries in St. Louis combined into one baking company, but concentration on a national scale did not appear until 1911 when 21 bakeries in 10 States and the District of Columbia were amalgamated into a single company. By 1925, 4 companies baked 20 percent of all the bread produced commercially in the United States, and 3 of these 4 companies were so closely affiliated as to constitute a single interest. When, however, an attempt was made to consolidate this control of the 3 largest baking companies into a single company, the Federal Trade Commission stepped in and obtained a court decree blocking it.

Biscuits and crackers by 1921 had so developed under the control of one company that many grocers could not operate in business without handling this cracker company's products. In 1921 it manufactured 55 percent of all the biscuits and crackers sold in the country. The Federal Trade Commission's report on biscuits and crackers, however, was necessarily incomplete, for, reports the Federal Trade Commission, "there were several companies that made serious difficulties about furnishing certain available data called for by the Commission. . . There were only 3 which willfully and contumaciously failed to do so. Among these was a biscuit company which made objections on various grounds, one of which was based on a false representation of the facts. Against this company the Commission through the Department of Justice has brought a mandamus proceeding to compel the production of the information refused."

Rewards from processing wheat appear more golden than the rewards from growing wheat. Gross income of wheat farmers declined 66 percent from 1929 to 1932, from $841,000,000 to $283,000,000. Through the efforts of the AAA, farmers were helped considerably after 1932. Benefit payments to wheat farmers in 1933 and 1934 amounted to about $100,000,000 for each year. Altogether, by 1934 farmers' income from wheat had recov-

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COOPERATION

Governors of two important States have already written cooperative news for 1938. Governor Lehman, in his annual message to the New York State Legislature, discussed the milk problem, so important to New York farmers and New York consumers. He declared: "Consumer cooperatives for direct distribution of milk from producer to consumer should be definitely encouraged."

Said the Governor: "There can be no satisfactory solution of the milk problem, either under State or industry control, if the milk of the producer is not made available to the consumer at a price he can afford to pay. Unjustifiable prices for any product lead to only one result—consumer resistance. Such a situation precipitates a chain of circumstances which inevitably leads to boycott, surplus and ultimate price collapse.

"The State should continue to lend its influence and aid to efforts to discover the correct solution of this problem. Establishment of consumer cooperatives for direct distribution of milk from producer to consumer should be definitely encouraged. These undertakings could be made yardsticks for the measurement of fair and just distribution costs. Their results, supplementing previous inquiries and the present audit of the company books, should provide the practical information on price spread that has heretofore not been available. Properly operated consumer cooperatives can supply milk at better retail prices and yet not impair a fair return to the producer."

Governor La Follette, at about the same time, issued a proclamation making the week of February 14, "Wisconsin Cooperative Week," in order "to take inventory of the important part that cooperation is playing in the economic and social welfare of our people and to emphasize the possibilities of service through cooperative action. . ."

"Today, more than ever," the Governor's proclamation pointed out, "it is recognized that many of our problems must be solved by the people themselves, working together in general educational, commodity marketing, and purchasing groups. If we are to attain the utmost good from cooperation, it is well to study and promulgate the principles of cooperative marketing as well as to acclaim the accomplishments of our various lines of cooperative endeavor in Wisconsin.

"It will be helpful to all to focus attention on this movement, to extend the teaching of its principles, to define its place, and to interpret its functions."

American cooperators would make it easier to import the products of British cooperators. In a recent memorandum to the State Department on the proposed reciprocal trade agreement with Great Britain, the Cooperative League of the U. S. A.—central educational and informational agency of consumer cooperatives in both farm and city areas—says:

"The consumers' cooperative movement believes in reciprocal trading and requests that the State Department study the possibilities of reducing tariffs on products manufactured by the cooperative wholesales of Great Britain, inasmuch as the British cooperative wholesales are the largest individual purchasers of American farm products."

Sightseeing trips to cooperative enterprises, and discussion, are on the agenda for 4 regional conferences on cooperation this winter. Sponsored by the Committee on the Church and Cooperatives of the Industrial Division of the Federal Council of Churches of Christ in America, these "Regional Sightseeing Seminars on Consumers' Cooperation" are being held at Columbus, Ohio, (February 3); Washington, D. C., (February 14–15); Boston and Maynard, Massachusetts, (February 27–28); and a fourth for the Mid-Atlantic States.

From consumer cooperative problems to world peace and war, from trade figures to a review of the plays and films of 1937—is the scope of "The People's Year Book" for 1938. Published by England's Cooperative Wholesale Society and the Scottish Cooperative Wholesale Society, this annual volume is like no other book. A summary of the year's events in photographs ranges from coronation crowds, through new cooperative factories in England and co-op stores in Finland, to war's destruction in Shanghai, Guernica, and Madrid. Some of the statistics are astronomical. Membership in the British cooperative movement added up to 7,800,000 in 1936. (Latest reports show an increase to over 8,000,000.) They, and, of course, many non-members bought, during 1936, one billion dollars' worth of foods, household furnishings, clothing, and coal in consumer cooperative stores. (Last year's business is reported to have reached one and one-fourth billion dollars.)

The 1,107 retail societies included

399 whose membership per society was less than 1,000; and 25 societies who had over 50,000 members each. Interest on members' share capital—always paid at a low fixed rate—came to 23½ million dollars. Cooperative society members finished the year's business with 113 million dollars available for patronage refunds and additions to reserves. Most of this sum members voted themselves as patronage refunds, since reserves are already ample in the old established British cooperative societies.

Employed by the British cooperatives in 1936 were 319,000 men and women. Their wages for the year came to 197 million dollars.

"Cooperation Overseas" is surveyed in brief discussions which cover 50 lands from Algeria and the Argentine to the United States, the U. S. S. R., and Yugoslavia. With their families, that would mean three or four times that number personally affected by consumer cooperative enterprise.

Another section is devoted to "Labor in 1937." The British Trades Union Congress and the Cooperative Congress have ratified a joint agreement urging the establishment of "Trade Boards" (minimum wage boards) in retail distribution. The cooperatives are now, it is agreed, paying higher than prevailing wages in retail employment.

College students took time out from their Christmas holidays to consider economic and social questions. Consumer cooperation was discussed at the annual American Student Union Conference on Vassar's campus at Poughkeepsie, New York. Student delegates heard the assistant secretary of the Eastern Cooperative League stress employment in cooperatives as an expanding vocation for college men and women, "today when other avenues of employment are so generally blocked."

At Oxford, Ohio, Miami University and Western College were hosts to the National Assembly of Student Christian Associations. To these conferees, the secretary of the Cooperative League of the U. S. A., proposed eating, housing, and other types of cooperatives to reduce the high cost of college education.

Five student cooperatives on the Wisconsin University campus at Madison have formed a University Cooperative Council. Typical of reasons why co-ops federate, is the five-fold program of the Council. It declares its purposes to be:

"(1) Pool ideas, information, experience; (2) buy collectively where desirable; (3) form a central educational agency; (4) promote fellowship among the campus co-ops; (5) further the cooperative movement."

Any club on the campus is eligible to membership in the Council, if it is organized along general cooperative lines. Present members of the Council are the Congo (Congregational) Cooperative Eating Club, Three Squares (Methodist) Club, Catholic Cooperative Eating Club, Wayland (Baptist) Club, and Delta Theta Sigma (men's agricultural fraternity). Managers of the clubs form a buying committee.

Twenty percent was the dividend declared by the Central Cooperative Association on commissions paid during 1937 for the sale of livestock for farmers of Minnesota, Wisconsin, North and South Dakota, Montana, and Iowa. The Association sold 22¼ million dollars' worth of livestock last year. Animals shipped in are sold on a per capita commission basis—70 cents, for example, per head of cattle. Dividends are paid from the savings made on commissions . . . The Association numbers about 20,000 individual members, and 575 member-associations; they recently announced a 1937 dividend of $73,000 which brings reported savings to a total of $1,680,000 in 17 years.

Cooperative stores at Greenbelt, Maryland, have no competitors in the Greenbelt model housing development itself. But groceries, butcher shops, and fruit and vegetable markets in Washington, D. C., and all along the road which most Greenbelters travel daily between home and the Capital, offer genuine competition.

Not uncritical about its cooperative stores is the Greenbelt Citizens' Advisory Committee on Cooperatives. One of its first tasks was a price-and-quality comparison of grocery products sold by the Greenbelt co-op grocery and by nearby stores. Four women members of the committee priced identical and similar items, and made suggestions as to type and price of merchandise they regarded as desirable for Greenbelt's store. Cans of milk, peas, peaches, and string beans were opened at a comparison demonstration, tasted, tested, compared.

The Committee summarized its report on the experiment as follows:

"1. Labels do not give much information.

"2. Price is *not* an indication of quality or value.

"3. Brands are *not* an indication of quality or value.

"4. Size of can does not determine actual food content.

"5. Some sizes in cans vary so imperceptibly as to be mistaken one for the other but actually contain one or two ounces less in content.

"6. Some merchandise not highly publicized may be very good in quality.

"7. Merchandise bought in bulk runs cheaper than packaged merchandise—e. g., soaps, shortening, etc."

More About Rents

Negro and native white families in the South report on their expenditures for space to live*

Cream puffs and cabbages, you'll grant, are two quite different things, and a family that made its meal on one would not only be more out of pocket than the family that dined on the other, but would get a different kind of nourishment. Comparing one family's food expenditures with another's, means little without some measure of the quality of nourishment received.

Shelter costs are even more tricky things to compare. We have no yardstick of value received for rent paid, such as the nutritionists have provided for foods. A rent of $15 a month in some spots may provide a bathroom; in another, not even running water in the house. Such a sum may buy the right to live in a shack, or a room. Housing costs in themselves tell nothing about the *quality* of the living space provided.

A month ago we lined up the rents that native white families in New England paid in 1935–1936. This time we marshal the facts for white and negro families in the South. First warning to proud boasters of the "land of low rents," wherever it may be, is to beware of using such figures as these to prove that it's

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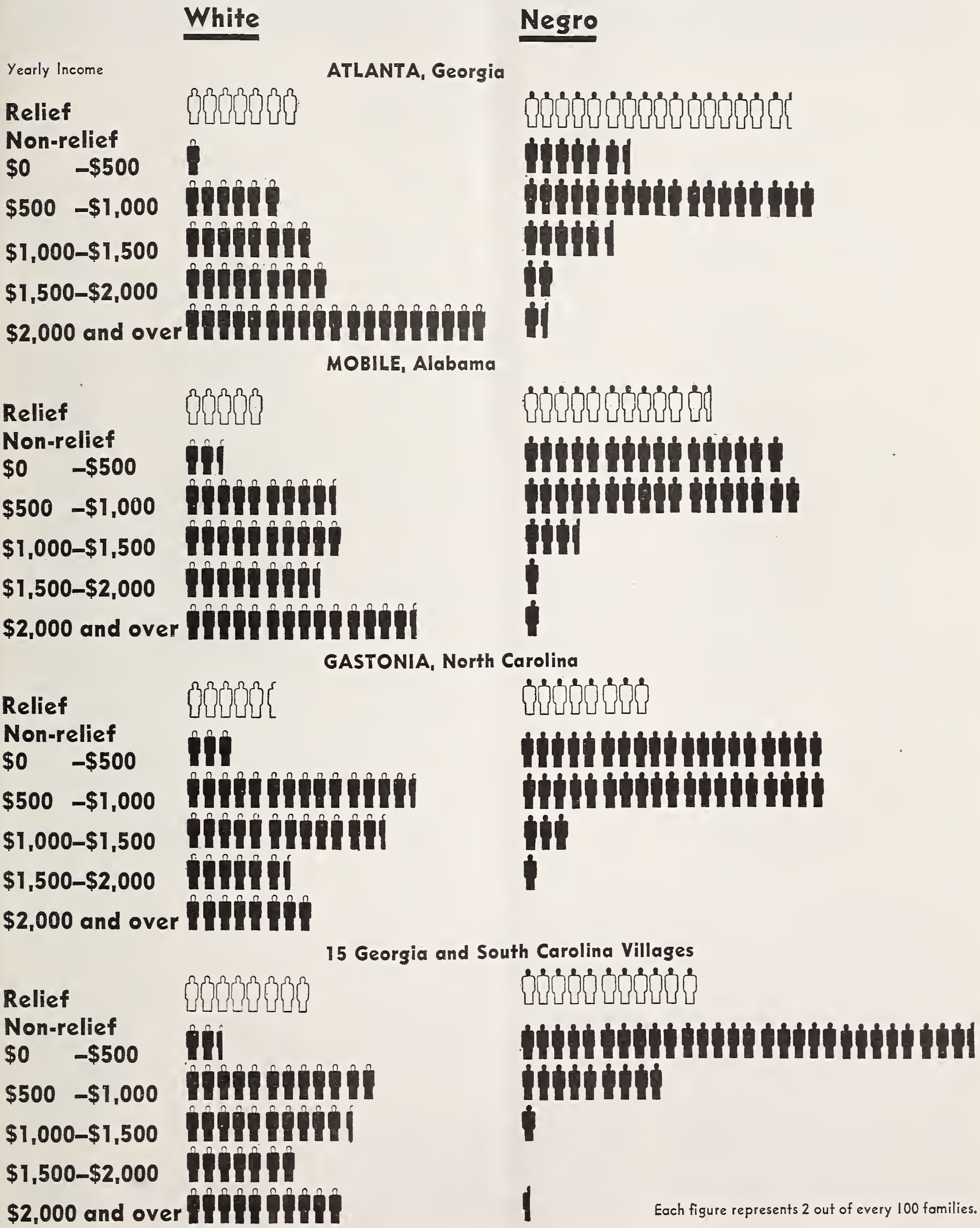
**This is the second of a series of articles on the findings of the Consumer Purchases Study. The first article appeared in the January 17, 1938, issue.*

Southern Native White and Negro Families Had These Incomes in 1935–1936



Each figure represents 2 out of every 100 families.

cheaper to live here than to live there. All these figures show is actual out-of-pocket expenditures for some kind of shelter, whatever it bought in space, light, and physical comforts.

Spotlighted in this part of the Consumer Purchases Study is that area bounded on the north by North Carolina, on the west by Mississippi, on the south by Georgia, and on the east by the Atlantic Ocean. Here are more people to the square mile than in other parts of the South. A greater variety in the size of communities shows here. There are fewer sparsely populated areas in the Southeast than in other southern regions.

Almost 51,000 families, all native born, were asked to tell their monthly rental bills to the scouts from survey headquarters. Some 34,000 were white families; 17,000 belonged to the negro race. As in New England, big and little places were covered: The largest was Atlanta, two-thirds of whose population of over 270,000 is made up of white, one-third of negro, families. At the other extreme were 33 North and South Carolina, Georgia, and Mississippi villages. In the Georgia and South Carolina villages, some 62 percent of the people are white and 38 percent negro. In the North Carolina and Mississippi villages the white population is only slightly larger than the negro.

Between these big and little places, the rent-data gatherers covered families in Mobile, Alabama, (population, 68,000; 64 percent white, 36 percent negro); Columbia, South Carolina, (population, 52,000; 62 percent white, 38 percent negro); Gastonia, North Carolina, (population, 17,000; 81 percent white, 19 percent negro); Albany, Georgia, (population, 15,000; almost evenly divided between white and negro); Sumter, South Carolina, (population, 12,000; with only slightly more white people than negro); and Griffin, Georgia, (population, 10,000; two-thirds white; one-third negro).

INCOME sets an outside limit on the money that a family can use for renting a place in which to live. Throughout these Southern communities, big and little, the level of incomes of native white families was considerably higher than that of negro families.

Fewer white families than negro had to depend on relief for their living. In none of the communities were there less than 15 out of every 100 negro families in this relief group. In Atlanta one-third of the negro families depended on relief. Only in the 15 Georgia and South Carolina villages were as many as 16 native white families out of every 100 recipients of relief, and in two communities the number was as low as 8.

Few native white families not on relief had incomes of less than $500. In all communities, except in Gastonia, the number was not over 5 out of every 100 families. In Gastonia, 6 out of every 100 had to live on such meager incomes. On the other hand, except in Atlanta, from one-quarter to more than a half of the negro families had incomes less than $500 a year. In Atlanta there were 13 out of every 100 in this group.

An imaginary line drawn between the families which were below the $1,000 income level or on relief and the families above the $1,000 income level would find them grouped like this: From about a quarter to nearly one-half of the native white families, either on relief or with incomes under the $1,000 line; from 82 to 97 out of every 100 negro families, either on relief or with incomes less than $1,000.

Negro families fortunate enough to have an income of $1,500 or more were few in these Southern communities, while a third or more of the native white families reached this income or topped it. In Atlanta 7 out of every 100 negro families had an income of $1,500 or better, but in no other community studied were there more than 5.

Now for a look at the rent paid. We skip over the rent figures paid by families with incomes of less than $500. Frequently when family budgets are as meager as that, the family has to piece out its rent money with help from other sources. Sometimes the amounts paid seem, by all ordinary rules of budgeting, out of proportion with the total income. In some instances, the families drew on savings or borrowed funds to meet their rental bills. A complete picture of how such families make up their rent money is not at hand.

IN THE $500 to $1,000 income group, rent averaged all the way from a low of $5 per month, paid by negro families in 15 Georgia and South Carolina villages, to a high of $14.40 per month paid by native white families in Atlanta. Negro families with incomes in this bracket consistently paid less than did the white families. Both in the case of white and negro families the amounts paid for rent in general grew smaller as the total population of the locality decreased.

How much of the family income rent absorbed, varied almost as much as did the actual cash outlays. Native white families with incomes of from $500 to $1,000 spent from 12 to 23 percent of their yearly income. A 12 percent allowance for rent meant, for such families in Gastonia, a rental bill of $7.40 each month. Atlanta white families, paying $14.40 a month, were the group for whom rent represented 23 percent of income. In the case of the negro families, rent took from 10 to 19 percent of income.

AT THE next higher level of income, those receiving from $1,000 up

What Rent Cost Families With Incomes at Three Levels

White

Rent Cost These Dollars Each Month	Yearly Incomes in 1935–1936	Rent Took This Percentage of Family Income Each Month
	Atlanta, Georgia	
$14.40	$ 500–$1,000	23
18.80	1,000– 1,500	18
25.00	1,500– 2,000	17
	Mobile, Alabama	
$13.40	$ 500–$1,000	21
16.70	1,000– 1,500	17
20.90	1,500– 2,000	15
	Columbia, S. Carolina	
$12.60	$ 500–$1,000	20
18.10	1,000– 1,500	18
26.10	1,500– 2,000	18
	Gastonia, N. Carolina	
$ 7.40	$ 500–$1,000	12
9.70	1,000– 1,500	10
14.40	1,500– 2,000	10
	Albany, Georgia	
$11.80	$ 500–$1,000	19
16.20	1,000– 1,500	16
21.70	1,500– 2,000	15
	Sumter, S. Carolina	
$10.82	$ 500–$1,000	17
16.36	1,000– 1,500	16
20.85	1,500– 2,000	15
	Griffin, Georgia	
$ 8.79	$ 500–$1,000	14
11.76	1,000– 1,500	11
15.83	1,500– 2,000	11
	18 N. Car. and Mississippi Villages	
$ 9.54	$ 500–$1,000	15
14.10	1,000– 1,500	14
18.23	1,500– 2,000	13
	15 Georgia and S. Car. Villages	
$ 7.66	$ 500–$1,000	12
11.16	1,000– 1,500	11
13.28	1,500– 2,000	9

Negro

Rent Cost These Dollars Each Month	Yearly Incomes in 1935–1936	Rent Took This Percentage of Family Income Each Month
	Atlanta, Georgia	
$11.10	$ 500–$1,000	19
14.50	1,000– 1,500	14
16.90	1,500– 2,000	12
	Mobile, Alabama	
$ 8.50	$ 500–$1,000	15
10.60	1,000– 1,500	11
11.80	1,500– 2,000	8
	Columbia, S. Carolina	
$ 9.60	$ 500–$1,000	17
11.70	1,000– 1,500	12
17.20	1,500– 2,000	12
	Gastonia, N. Carolina	
$ 6.90	$ 500–$1,000	13
10.60	1,000– 1,500	13
13.50	1,500– 2,000	10
	Albany, Georgia	
$ 6.80	$ 500–$1,000	13
8.60	1,000– 1,500	8
11.10	1,500– 2,000	7
	Sumter, S. Carolina	
$ 6.50	$ 500–$1,000	12
9.40	1,000– 1,500	10
20.00	1,500– 2,000	14
	Griffin, Georgia	
$ 7.91	$ 500–$1,000	14
9.62	1,000– 1,500	10
12.00	1,500– 2,000	9
	18 N. Car. and Mississippi Villages	
$ 5.90	$ 500–$1,000	11
8.04	1,000– 1,500	8
14.20	1,500– 2,000	10
	15 Georgia and S. Car. Villages	
$ 5.26	$ 500–$1,000	10
7.62	1,000– 1,500	8
....	1,500– 2,000	..

to but not including $1,500, monthly rent payments averaged from a low of $8 for the negro families in the villages to a maximum of $18.80, the average paid by native white families in Atlanta. In most places, the rents paid by negro families were from $2 to $6 less each month than those paid by native white families. Expenditures for this item in living did not vary as closely with the size of the community as in the case of the $500 to $1,000 income families.

Rent absorbed a slightly smaller proportion of the family purse for this group. For this one item in the cost of living native white families used from 10 to 18 percent of their income; negro families, from 8 to 15 percent.

STEPPING UP, now, to the families in slightly easier circumstances, those with incomes of from $1,500 to $2,000. Rents also increase in amount. Bottom figure for native white families in this group was the average rental paid by those in 15 Georgia and South Carolina villages, $13 a month. Similar Gastonia families averaged $14.40 a month. From there, average rents mount to a top of $26.10 in Columbia. Lowest rent for the negro families averaged $12 in Griffin; top was $20, averaged by those in Sumter—just $1 less than the average of white families in this fairly small South Carolina town.

[Concluded on page 17]

CONSUMERS' MAILBOX

What is the difference between commercial salad dressing and mayonnaise?

—Indiana consumer.

There's no neat answer to this question that will serve as a practical guide in choosing which you will buy from your grocer. Officially, a product labeled as "mayonnaise" must have edible vegetable oil and egg yolk or whole egg in it. That's a rule of the Food and Drug Administration. How much egg, the rule doesn't say, but it is very definite about the minimum amount of oil allowable: At least 50 percent of the finished product must be oil. Other flavorings may be added or not, as the manufacturer chooses: such things as vinegar and lemon juice, salt and spices, sugar or dextrose.

To Food and Drug officials, the important point about mayonnaise is its oil content. When it came to fixing the proportion at 50 percent, they had to follow fairly closely trade custom because housewife customs in mayonnaise-making are fairly indefinite. Any cook who makes jelly can tell right off the bat what proportions of fruit to sugar she uses. It's not so easy to find the cook who knows the proportions of oil to total volume, or oil to egg volume, in mayonnaise-making.

While minimum oil content for mayonnaise is set at 50 percent, there is no rule against putting lots more oil than that in a product. It's up to the manufacturer to tell on the label, if he wishes to, when his product exceeds minimum requirements. It's his prerogative, too, to decide whether you should or should not be let in on knowing what other things—and how much of them—he puts in his mayonnaise. There's no law requiring him to tell his customers anything about his formula—with one exception: If he puts one ingredient on the label, Food and Drug officials rule that he must name all. Otherwise his label might be misleading.

What kind of oil goes into mayonnaise is the manufacturer's choice also, except that it must be an edible vegetable oil by the rules of Food and Drug. Most commonly used is cottonseed oil. Some products are made with olive oil. A manufacturer may shift from one type of oil to another, if relative market prices are important enough to weigh against the inadvisability of changing formulas.

On salad dressings, official rules are silent. No legal definitions exist, primarily because Food and Drug officials hold that salad dressing is a generic term which refers to any kind of a dressing that anyone might reasonably be expected to put on a salad. It covers a multitude of concoctions made in a multitude of ways. To define minimum standards for such a food would require giving special meaning to a word that doesn't have one.

Some salad dressings on the market may have as high an oil content as mayonnaise must have. Some may be as rich in egg. As far as legal requirements go, neither oil nor egg have to be in the product. Since egg yolk need not be used as the emulsifying agent, starch or some other moisture-absorbing ingredient is frequently used. As there is no regulation of the amount of oil, a salad dressing usually has a lower oil content than mayonnaise.

Absence of official rules for salad dressing ingredients, mayonnaise makers sometimes claim, gives advantage to their competitors, because they can turn out a cheaper product. This is how one trade authority puts the problem:

"Salad dressing has to a large extent displaced the volume of mayonnaise. The recent survey by the Department of Commerce shows that the relative proportion of salad dressing today is 6 to 4 as against 6 to 4 in favor of mayonnaise not more than 5 years ago. I am sure that it will interest you to know how this change came about in the eating habits of the American consumer.

"Inasmuch as there was no standard for salad dressing, extensive campaigns for the sale of salad dressing were very successful due to the fact that the price of salad dressing is less than the price of mayonnaise. This latter is possible by virtue of the fact that there is a lower oil content in salad dressing. For example, it has been customary to manufacture mayonnaise with as high an oil content as 75 percent and in no case less than 50 percent, whereas in the sales of salad dressing the product rarely has more than 45-percent oil content and very frequently has as low as 2 and 1 percent. Such being the case, the consumer is clearly being mulcted."

In this statement, it will be noted, the term "salad dressing" is used in a restricted sense, as a dressing which in appearance, and often in other characteristics, closely resembles true mayonnaise dressing.

Mulcting the consumer, Food and Drug officials hold, can only be proved if consumers expect the two types of dressing to have somewhat the same amount of oil in them. Officials haven't been able to prove, by their sampling of consumer opinion, that this is so. But they always welcome proof that they are wrong. Any consumer who feels that food and drug regulations stop short of fair and adequate protection by failing to set minimum standards for salad dressing, can write so to that Administration.

Why do mayonnaise and salad dressings go rancid?

Rancidity is due to the oxidation of the oil in the dressing. The fresher the oil used in making the product, the less chance for future rancidity. Manufacturers bottle their dressings as soon as possible after they are made. Oil in mayonnaise will oxidize when exposed to the air. A little oxidized mayonnaise mixed with mayonnaise that is still sweet hastens the spoilage of the whole batch. You have probably noticed the film that forms on a bowl of mayonnaise that stands for some time. This film is the oxidized oil which makes for rancidity. Long-time sweetness of mayonnaise depends primarily on quality of the ingredients used in making it, but to preserve this sweetness, remember to keep the cover on your dressing jar. Only take from the container the amount you intend to use at the time.

Our class would like to know if there is any law against merchants selling bad eggs. What can be done if merchants refuse to make good for bad eggs sold?"

—Detroit consumer.

To question No. 1.

It depends on the laws of the city and State in which you live.

Under the Federal Food and Drugs Act, eggs which are filthy, putrid or decomposed in whole or in part are adulterated and liable to seizure if shipped in interstate commerce. "The following are regarded as inedible eggs: black rots, white rots, mixed rots (addled eggs), sour eggs, eggs with green whites, eggs with stuck yolks, moldy eggs, eggs showing blood rings, eggs containing embryo chicks and any other eggs which are filthy, decomposed or putrid."

Most States have food laws which apply to eggs. Many cities have specific regulations on eggs.

Eggs may be fresh when a merchant buys them but they may spoil in a store. Eggs are a perishable product. In order to keep their quality, they must be kept in a cool place. "Strictly fresh" eggs in a window which is warmed by the sun will not stay strictly fresh very long. Eggs kept under proper conditions for five months might taste "fresher" than those which have been sunned for two days.

(2) Merchants who refuse to exchange good eggs for bad are few. Refusing to do so would undoubtedly mean a loss of customers. If a merchant does object to making good for a sale of bad products, first find out what your city and State laws require in the sale of eggs. If there are any legal requirements which the merchant has failed to live up to, call his attention to the law. The selling of bad eggs is usually of interest to the city health department, and to the Better Business Bureau of any community, which can sometimes bring pressure to bear on the recalcitrant merchant.

Every year more and more merchants are selling Government graded eggs which are packaged in sealed cartons. The seal gives the grade and the date when the eggs were graded. According to Government experts, if eggs are properly handled, they should hold their grade for at least five days.

For further information on eggs write to the Superintendent of Documents, Washington, D. C., for our bulletin, CONSUMERS LOOK AT EGGS. The price is 10 cents.

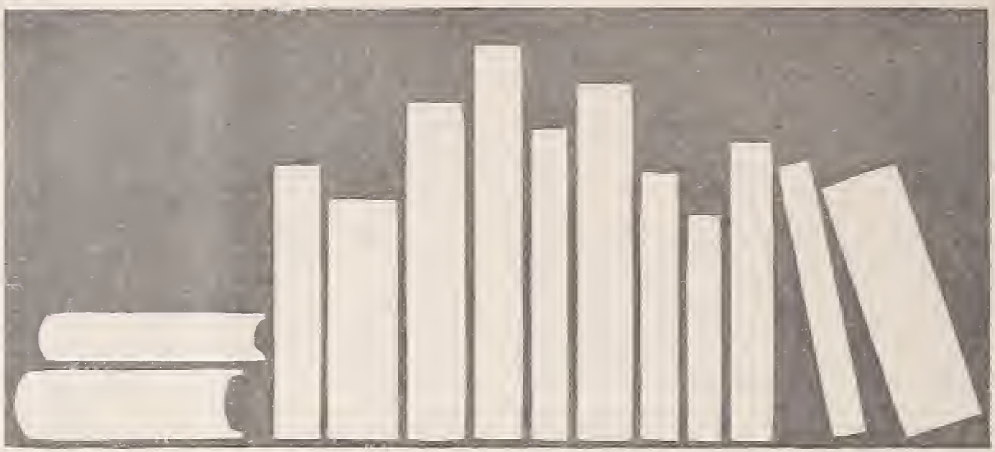
MORE ABOUT RENTS

[Concluded from page 15]

Approximately the same proportion of family income was paid for rent by families at this economic level as by the families with incomes of from $1,000 to $1,500; 10 to 18 percent, in the case of the white families; 8 to 14 percent, for the negroes.

Consistently, throughout this study, families increase their expenditures for space in which to live as their income grows. Within each income group, wide differences in rental expenditures show up, depending on the kind and size of community. Rent for families in villages appears to be almost without exception a smaller cost than for families in larger places. As a usual thing, compared with other localities studied, rent for families of all income levels is highest in Atlanta.

These things hold true for native white and negro families alike. But the chiefs of the survey found that while negro families in the South set aside proportionately less of their incomes for rents than native white families, this was not true of negro families in northern cities. There the rental bills of negro families were lower than those of the white families, but the percentage of income which was required to meet the bill was higher than that of the white rent payers.



Consumers' BOOKSHELF

Fabrics and Designs for Children's Clothing, by Clarice L. Scott and Margaret Smith, U. S. Bureau of Home Economics. Farmers' Bulletin No. 1778. 1937, pp. 23, illus. Address: Superintendent of Documents, Washington, D. C. 5 cents. This pamphlet supersedes a series of leaflets dealing with children's clothing previously issued by the Bureau of Home Economics. Contains general sections on fabrics, garment designs, workmanship, and labels on fabrics and ready-made garments. Gives specific suggestions regarding design and construction features for slips and sleeping garments for infants, rompers for creeping babies, suits and dresses for older children, summer outfits, and winter playsuits.

Homes for Workers, by Housing Division of Federal Emergency Administration of Public Works. Housing Division Bulletin No. 3, 1937, pp. 87, illus. Address: Federal Housing Administration, Washington, D. C. Free to librarians and persons having a special interest in housing problems. Discusses such questions as: Present status of housing programs, effects of bad housing, possible contributions of local, State and Federal governments to the improvement of housing conditions, and the future of private and Government housing. Annotated bibliography.

Trade Practice Rules for the Rayon Industry, promulgated by the Federal Trade Commission, Oct. 26, 1937, pp. 8. Address: Federal Trade Commission, Washington, D. C. Free. The Rayon Trade Practice Rules mark an important advance in fiber identification. Purpose of the rules is "to provide for proper fiber identification and disclosure of rayon and rayon products and for the prevention of misinformation, misrepresentation and deception, in the interest of fair competition and consumer protection."

Federal Trade Commission Procedure. 1936, pp. 4. Address: Special Board of Investigation, Federal Trade Commission, Washington, D. C. Free. This leaflet discusses the powers and duties of the Commission. Describes in some detail the procedures followed by the Special Board of Investigation in the regulation of advertising.

Textiles, General Specifications, Test Methods. Federal Specification CCC-T-191a. Apr. 1937, pp. 21. Address: Superintendent of Documents, Washington, D. C. 5¢. This publication "gives the general physical and chemical methods for testing textiles for conformance with the requirements of Federal Specifications." Of interest to teachers of home economics and other technically trained people.

Analysis of United States and State Standards for Fresh Fruits and Vegetables and Legal Standards for Dairy Products, by Consumers' Project, Department of Labor. 1937. Address: Superintendent of Documents, Washington, D. C. 25 cents. Contains 25 charts for use by graders, buyers for institutions and cooperatives, and others interested in standards. Gives detailed analyses of the condition, quality and size requirements for both Federal and State standards for 117 types of fresh fruits and vegetables, and nuts; and 10 types of dairy products.

Methods and Equipment for Home Laundering, by Ruth O'Brien and Helen S. Holbrook, U. S. Bureau of Home Economics. Farmers' Bulletin No. 1497. 1926, revised 1937, pp. 39, illus. Address: Superintendent of Documents, Washington, D. C. 5¢. Section one contains a discussion of general principles of construction, operation, and selection for hand and power washing equipment, laundry stoves, boilers, and ironing equipment. The second section on laundering methods gives directions for washing different kinds of fabrics, and handling such special laundry work as lace curtains, pillows, and infected clothing. Soaps and other laundry supplies are considered.

VITAMINS IN FISH OILS

[Concluded from page 6]

the vitamin you do not need. Some preparations offer what is known as a "shotgun prescription"—5 or 6 different vitamins in one capsule or tablet. It is, of course, worth paying more for all these vitamins only if you know you want all of them.

Before you buy, read the labels on vitamin preparations. Note carefully their Vitamin A and Vitamin D values. Some cod-liver oil labels give vitamin content per teaspoonful; generally they give Vitamin A and Vitamin D strength per gram. But the contents of the bottle are stated in ounces—measures of liquid volume—while grams are a measure of weight. Comparing the vitamin content of different preparations is an involved problem in arithmetic. The number of buyers who can, or wish to, convert themselves into calculating machines when they go to market for such products, is few. For what it's worth, we give here a way to do the necessary computations.

To translate potencies per gram of cod-liver oil into potencies per ounce, multiply by 27.6. To get the total number of units of each vitamin in the bottle, multiply the potency per ounce thus obtained, by the number of ounces in the bottle. To know the number of units of each vitamin in a given dose of oil, remember that a therapeutic teaspoonful holds 3.67 grams of cod-liver oil.

For the concentrates, multiply the strength per tablet or per capsule—but not the strength per gram, which is greater—by the number of capsules or tablets in the box. Do not be confused by comparisons stated in terms of U.S.P. "standard" cod-liver oil, since much of the oil on the market is above the U.S.P. minimum. If you wish to make your own comparisons between competing products, use the potencies actually stated on bottles of cod-liver oil.

As a single example, take a cod-liver oil selling at $1 a pint, and assaying 2,000 units of Vitamin A and 125 units of Vitamin D per gram. Translated into values per ounce, this would be 55,200 units of A and 3,450 units of D to each ounce of the oil. The 16 ounces of the bottle would have a total potency of 883,200 A units and 55,200 D units. This would be equivalent to 8,832 units of Vitamin A and 552 units of Vitamin D for each penny's expenditure. The same calculations for another product would indicate whether—if its label's claims are accurate—it would be a better buy.

Rules for care of vitamin preparations, once you have bought them, are simple but important. Keep cod-liver oil in a cool, dry, dark place. Vitamin A is easily destroyed when warmed or exposed to the air or light. Vitamin D is not readily destroyed. But the two come together in cod-liver oil. Cod-liver oil is best kept at ice box temperature; capsules and tablets with Vitamin A content likewise. Open the cod-liver oil bottle only as long as necessary; at other times see that it is tightly closed.

To test the growing volume of vitamin products, Food and Drug Administration set up, less than 3 years ago, its Vitamin Division. Since we import most of the cod-liver oil used in this country every year as human food and for animal and poultry feeding, the new Division has devoted chief attention to imports. Last year samples from 880,000 gallons of cod-liver oil imports were tested. About a third of these shipments were found below the U.S.P. minimum requirement in Vitamin D, and were turned back from American ports. More recent assays show an improvement in standards of cod-liver oil imports.

Domestic vitamin products in interstate commerce are also assayed by the Food and Drug Administration's chemists. Tests last year on samples from 34 shipments showed that 24 of these products did not have the vitamin potencies their labels claimed, or fell below U.S.P. standards. A number were otherwise misbranded, or adulterated. These shipments were removed from the market.

Our thanks are due to E. R. Squibb and Sons for the illustration on page 3.

THE DRAMA OF WHEAT

[Concluded from page 9]

ered to about 60 percent of the 1929 figure compared with the 34 percent level it had fallen to in 1932.

But compare these figures with the average annual profits of 11 flour milling companies. For the 6 years from 1929 through 1934 they earned an average of $131,000,000 a year, an average return on the investment in their business of 8.25 percent. In the very worst year of the depression the percent of profits on their investment in their business did not go below 5 percent and in the best year it went above 12 percent.

Sixteen middlemen by the same measure did well too. Their annual average profit was $7,000,000, an average of 10.6 percent on their investment in their business.

Three cracker companies averaged 15 percent profits on their investments in their business during the same 6 years. In their worst year they earned 9 percent, and in their best year they earned 21 percent.

Four wholesale baking companies average profits of 9 percent on the investment in their business for the same 6 years, in their best year this went up to 16 percent, in the worst year it declined to 5 percent.

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CONSUMERS' Guide

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Crusade for Facts

CONSUMERS' Guide

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THERE is horse-and-buggy-age buying by consumers today, just as there are antiquated patterns of other kinds of human behavior, but the number of consumers who are trying to put order and discrimination in their buying is increasing daily. Government agencies servicing consumers know this from the growing demand for facts about products and for buying guides.

In the first article in this issue the suggested tests of household products provide one kind of approach to the study of buying problems. Consumers seriously interested in equipping themselves as skilled buyers will, of course, not be content with such exercises. They will want to familiarize themselves with what government and industry offer as aids to rational buying.

Learning what a federal specification is like is a worthwhile lesson in the art of buying which every consumer should take. Guesses go by the board when the U. S. Government goes to market. Even before it makes up a marketing list, it puts laboratory experts to work, testing and checking, defining and redefining, so that when orders are ready there will be a minimum of doubt as to exactly what is wanted.

A federal specification not only describes the kind and quality of product desired but also the testing procedure to be followed in checking the product when it is delivered. From acetone, through adzes, hacksaw blades, medicine droppers, overshoes, pancake mixtures, shears, and soap, down to zinc oxide—these prescriptions, as it were, cover a multitude of goods, many of them the kind of household goods which an average family purchases. Anyone may secure free of charge "Price List 75, Federal Specifications," from the Superintendent of Documents, Washington, D. C., which gives ordering information on more than 1,100 specifications now available.

Industry, too, is attempting to work toward more accurate identification of products and the development of standards of size and performance. Not only consumer demand but sound business interests dictate pushing forward such work. Standardization is one route to lower production costs. "Commercial Standards" developed between industries and the National Bureau of Standards, and "Trade Practice Rules" prepared by the Federal Trade Commission, both in Washington, sometimes lay the foundation for standard practices helpful to household buyers. Consumers do well to keep informed on them.

Thirty-five trade associations are now engaged in standardization activities. An Advisory Committee on Ultimate Consumer Goods, with representatives of 5 national consumer organizations and the National Retail Dry Goods Association, has for a year been coordinating and directing the work of the American Standards Association in the consumer field. The National Retail Dry Goods Association, itself, has created a Consumer-Retailer Relations Council to study labels and recommend improvements in them.

At least a half-dozen large retail stores have set up their own testing laboratories for products sold in their shops. A large commercial testing laboratory is setting up little unit laboratories in smaller stores here and there over the country.

"Testing for consumer values," comments one trade journal, "is today at the threshold. It can be either boon or boondoggling, depending on the intelligence or forthrightness with which it is used."

Public schools, also a useful source of information for adult groups, are turning their attention to problems of consumers, and revamping courses in economics and business, in science, in mathematics, to tie them in with everyday buying experience of families. Even grade school youngsters are putting products through the paces in laboratories.

On the opposite page we show a photograph of some 8- and 9-year old laboratory workers in a school near New York who are comparing 8 brands of white bread for weight, texture, freshness, taste, molding time, weight loss, and price. These young consumers put their conclusions into practice. When they found bread No. 3 came out ahead of all others, they reported this to the 12-year old class whose members help in planning school meals. Bread No. 3 was promptly substituted for Bread No. 5 which the young stewards had until then been buying for their school. The school is now making a practical check of the testers' results. Soups, breakfast cereals, cleaners, paints, canned goods, textiles, and kitchen cutlery are some of the other consumer goods on the outline for work in this school.

There's work—and help—aplenty for the consumer group that wants to make a study of buying guides a major feature of its program.

The little scientist on our cover page is watching what happens when sulphur and iron filings are heated together in a test tube, a first step in the study of the relative rustability of a number of "stainless" steel kitchen utensils and tools.

Crusade for FACTS

FACTS—that's what consumers are after these days! Facts that answer such questions as these: What is it made of? How good is it? What are its best uses? How long will it wear? We give here some tests of common articles which can be made in clubs and schools, at meetings, in homes.

Stretching dollars to cover family wants—ask any family with less than $1,500 a year!—is no amusing pastime, but the family that knows how to pick and choose, how to balance relative needs, when to plunge and when to hold back on important expenditures, usually comes up winner. That's reason No. 1 for this crusade for facts.

Consumers are learning, too, that government and industry consider it bad business to buy by guess. They see these great purchasers buying by standards, and ask quite logically, why don't we? That's reason No. 2 why household buyers are on the march.

From 4 different sources, consumers are now looking for help in their buying problems. One of them is government; another, industry; a third, independent testing agencies. The fourth is their own clubs and schools and improvised laboratories. In this story we are going to describe some of the tests which consumers can make for themselves.

There's fun as well as education in amateur testing, but the wise consumer must know also its limitations. Scientific conclusions depend on scientific technique. Obviously no one consumer group can attempt exhaustive analysis of all varieties of one product. (Some years ago it was said that there were 4,500 different brands of canned corn!) There is need, therefore, to guard against generalizing on the basis of a limited test. Nor can most consumers bring to their research the trained skill of a laboratory expert. Sometimes, only one of many qualities of a product lends itself to amateur testing. The value of a kitchen knife, for instance, depends not alone on whether its stainless steel will resist rust; a consumer test that seems to establish its rustability tells nothing about the cutting quality of the steel.

Such warnings are necessary, but they need not discourage consumers from using facilities at hand to learn more about the products they must buy. Now for some specific plans.

TESTING FOR QUALITY IN CANNED GOODS

Quality graders for canned fruits and vegetables in the Bureau of Agricultural Economics have worked out systems for grading many such products. Their methods and score cards have been published and furnish a basis for consumer tests. Copies of the Bureau of Agricultural Economics' standards can be secured free of charge from that Bureau in the Department of Agriculture, Washington, D. C.

As a starter we suggest that you try grading cream style canned corn. As your guide in this work, use the publication, "United States Standards for Grades of Canned Corn—Cream Style," Service and Regulatory Announcements No. 139. Hereafter we will refer to this publication as the Standards Booklet. A limited number of copies will be sent free on request to the Bureau of Agricultural Economics, U. S. Department of Agriculture, Washington, D. C. This publication contains the grading instructions and a score card for recording the results of your study. Also ask the Bureau of Agricultural Economics for a free copy of "Government Grading of Canned Fruits and Vegetables: Questions and Answers." Other background reading, useful in this enterprise, are these articles from the CONSUMERS' GUIDE: "Toward Better Consumer Standards," (December 14, 1936); and "How Cans Compare," (October 5, 1936).

It's a good rule for the leader of a group to try out a project first before staging a group test. On the basis of his own experience, the leader then knows how best to divide the various jobs among the members of his group.

Tests need properties. For a group that is testing for quality characteristics of canned corn this equipment is necessary: As many shallow pans as there are cans of corn to be graded. White enamel pans are used by government graders but any type of shallow cake pan will do. Other items are an accurate scale for checking the net weight of the can contents; a tea strainer for washing some of the corn so that the kernels may be more easily inspected; a can opener which will cut the lid of the can completely out very close to the rim.

Now divide your group. Subgroup No. 1 can make a chart for tabulating the following information about each can: brand name; name of packer and/or distributor; net contents shown on the label; net contents as found by actual weighing; price per can; price per pound. After the chart is made and filled in as far as can be from the information on the label, remove labels and attach to each label and to each can from which it is removed a key symbol which will identify the can as it is put through its paces later on.

Sub-group No. 2 might then undertake a closer study of the labels. What kind of information is common to all labels? What distinctive features does each have? Appraise each bit of information for its usefulness to consumers in judging both the amount and quality of the contents. List the adjectives used in describing the corn. Do these adjectives give consumers a sure basis for comparing quality? Let these members draft what they think would be an ideal label.

In studying labels, useful supplementary reading is "A Study of Labeling of Certain Canned Goods," made by the District of Columbia Home Economics Association. This pamphlet may be secured from the American Home Economics Association, Mills Building, Washington, D. C., for 25 cents. Because many canners and consumers are debating the relative merit of "descriptive" and "grade" labeling, the members of such a group as this will want also to study statements made in support of "descriptive" labeling by the National Canners Association, whose headquarters are at 1739 H Street, Washington, D. C.

If you look at page 1 of the Standards Booklet (Service and Regulatory Announcements No. 139) you will find a definition of canned corn, a description of the two styles of pack—cream style and whole-grain style—and a general description of the different grades. This page is just an introductory statement and requires no action on the part of the group other than careful reading. The real work begins on page 2 with

Students in an Ohio high school are testing (above) some tooth powders and tooth pastes for abrasive qualities. A federal specification describes the method of making this simple test. In the laboratory of a school near New York City, these young consumers (below) are finding out if kitchen tools bought as "stainless" steel are really so.

the section, "Prerequisites to Grading." Sub-group 3 should be assigned to check the information in this section: First, the cans should be examined to see if they are sound, clean, free from rust and serious dents, and the ends flat or concave. A bulging end in a can indicates spoilage.

Sub-group No. 3 should also see if the cans meet the fill of container requirement described on page 2 of the Standards Booklet. Regulations of the Food and Drug Administration contain a blanket provision that cans will be considered slack fill if the head space, measured from the top of the product to the underside of the lid, exceeds 10 percent of the total inside height of the container. The table at the bottom of page 2 of the Standards Booklet gives the number of sixteenths of an inch head space allowed for each regular sized can. Shake the can vigorously. Cut out the top of each can, scrape the contents adhering to the top back into the can, and carefully measure the head space.

You are now ready to start actual grading, and all members of the group should participate in this activity. The instructions for grading begin at the top of page 3 of the Standards Booklet under the heading "Ascertaining the Grade." Use the score card reproduced on page 5 of the Standards Booklet for recording the scores with reference to color, consistency, absence of defects, cut, maturity, and flavor. A few suggestions on rating each of these qualities are given below.

COLOR: The outside coverings of kernels of young corn at the prime stage have a bright sheen. As the corn becomes more mature the covering of the kernel becomes thicker and duller in color. Place two tablespoonfuls of corn from a can in a tea strainer and wash the kernels by letting water run over them. Place the remaining contents on a

With a copy of the U. S. quality standards for canned peas in hand, this consumer is evaluating the contents of 3 different brands. Note that labels have been removed from the cans; liquid contents have been strained off into measuring cups; and the peas spread out in shallow pans for examination.

square of white paper marked with the number of the can. Repeat with another can. Compare the color of the kernels, and fill in the score sheet.

CONSISTENCY: Kernels of canned corn are considered to be in one of 4 general stages of maturity, called by graders the early cream, cream, dough, and hard stages. Each of these stages produces a particular consistency of canned corn. The best time to check this is when you pour the corn from the can into the shallow grading pan. As you pour the corn out note that in some cases it rounds out into a low mound of even contour. This corn is of a creamy consistency. Other cans when poured do not round into an even mound, but are irregular in shape and the product is pasty or crumbly. This is low grade corn. In some cases where corn is too mature the canner adds salt brine to the corn to make it of a creamy consistency. If after you have let the corn set in the pans a few seconds you notice some free liquor which looks like water running out at the edge of the mound of corn you may know that brine has been added. Such corn properly belongs in Grade C.

ABSENCE OF DEFECTS: This requirement deals principally with workmanship in canning the product. The corn should be spread out as thinly as possible on the bottom of the pans. It should be gone over carefully with a fork or spoon and all objectionable substances such as silks, husks, particles of cob, hard kernels, worm eaten kernels, pulled kernels, and discolored kernels, removed and placed on a square of white paper numbered to correspond with the can number. Sometimes when there is a crack in the tin or enamel coating of the inside of the can, the sulphur, which is present in all corn, unites with the steel in the can to form "can black" which is an easily discernible black substance, the chemical name of which is "ferro-sulphide." The standards for this section call for inspection of the can for rust and "can black." The presence of either lowers the score decidedly.

CUT: To make the rating on this point use the corn which was washed for checking the color of the kernels. Are the kernels severed cleanly and at a fairly even distance from the cob? If the cuts are irregular or if part of the cob tissue is included in the cut, the corn should receive a low score.

MATURITY: When we discussed checking the consistency of the corn we mentioned the different stages of maturity: early cream, cream, dough, and hard. Now give the maturity of the corn a definite score. Press kernels taken from the different pans and compare their firmness. By chewing a few kernels you can tell a great deal about maturity. Note that the standard specifically provides that corn which has reached the dough stage shall be graded not higher than Grade C no matter what its total score is.

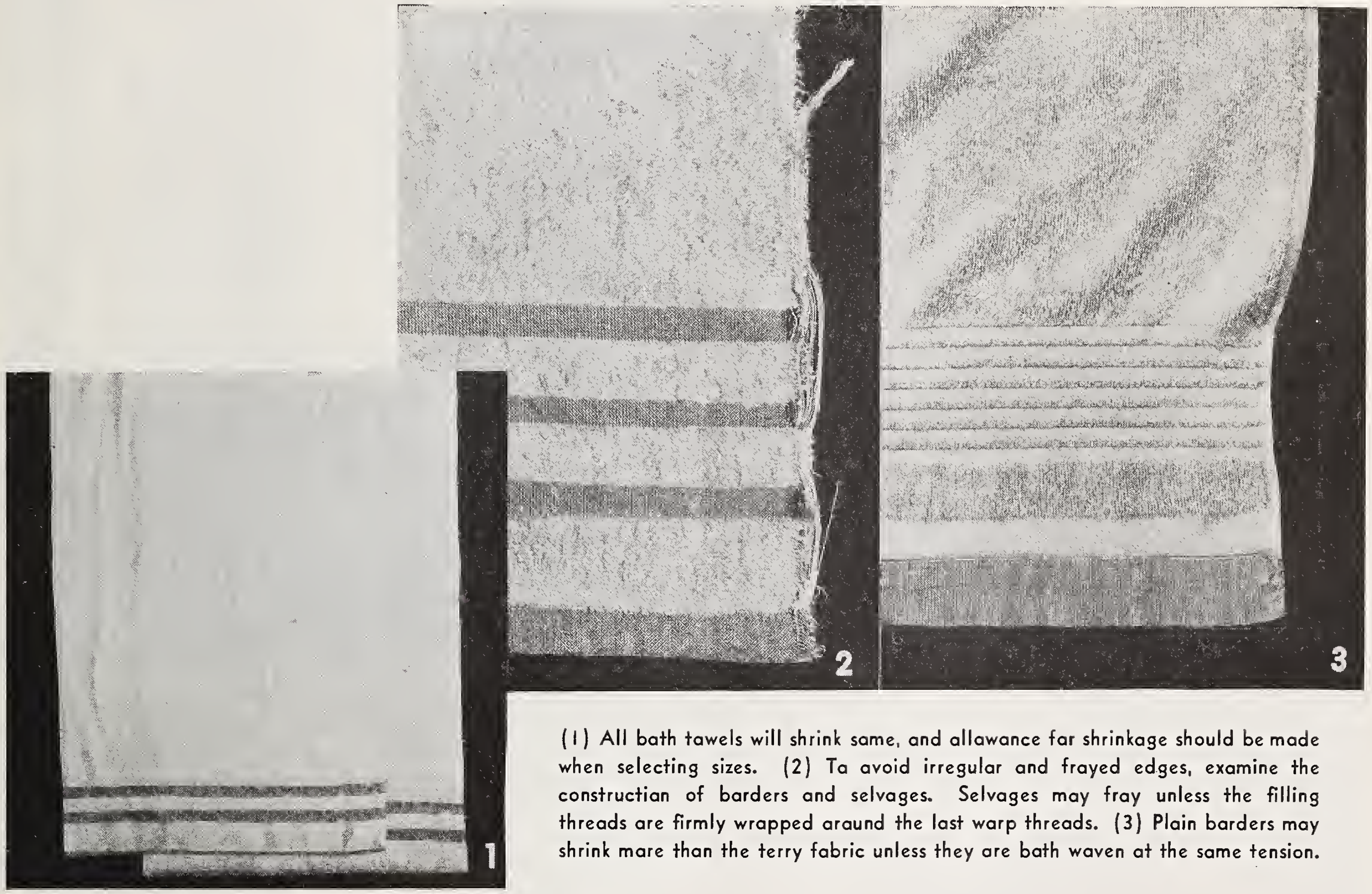
FLAVOR: After tasting the corn in the different pans you will begin to appreciate that there is a difference in flavors of corn. If it has a typical, distinctly young, tender corn flavor, give it a high score. If it has a rather dry, starchy, corn-mealy taste give it a score that will place it in Grade C. If it tastes musty, scorched, or if it is excessively salted or sweetened, give it a score that will place it in Grade D.

Now you are ready to add up the scores and determine the final grade according to the total points awarded. Next have a report from the subcommittees which checked up on label information, and the net weight and fill of container requirements. Summarize the discussion which has been going on all during the grading process. Probably there will be some disagreements as to the final estimates of grades and as to general conclusions. Average the

[Continued on page 18]

When You Buy Bath Towels

Experts of the Bureau of Home Economics tell you how to spot the best values in this household necessity



(1) All bath towels will shrink some, and allowance for shrinkage should be made when selecting sizes. (2) To avoid irregular and frayed edges, examine the construction of borders and selvages. Selvages may fray unless the filling threads are firmly wrapped around the last warp threads. (3) Plain borders may shrink more than the terry fabric unless they are both woven at the same tension.

IT MAY be used only for three to five minutes every day—a mere sliver of time in the span of 24 hours—but during that brief period the yard or so of terry cloth known as a bath towel, becomes an essential commodity in our lives.

Quick absorbency in a towel and size are all-important to the bather of the moment but to the custodian of the linen closet and of the family budget, there are many other features that the perfect towel should have. Besides being a quick drier, it should wear well, and should hold its shape and color through many washings. However, if the consumer is to be certain of all these factors which make for quality in towels, she needs information when selecting them. Facts on the label as to the size of towel, its absorptive power, and the number of yarns to the inch and the breaking strength of the material would be a definite help.

Ability of a towel to absorb moisture and not be weighed down by it so that for hours it will hang like a limp rag on the rack depends on the amount of pile or looped surface it has. The more pile yarns there are to the inch the greater the drying power of the towel.

Terry cloth used in turkish towels is woven with three sets of yarns. One set of warp and one set of filling yarns make the foundation cloth and an added set of warp makes the pile. The pile loops increase the surface area of the towel and hence its absorbency. The loops should be made of soft, not too tightly twisted yarns, and should be reasonably close together.

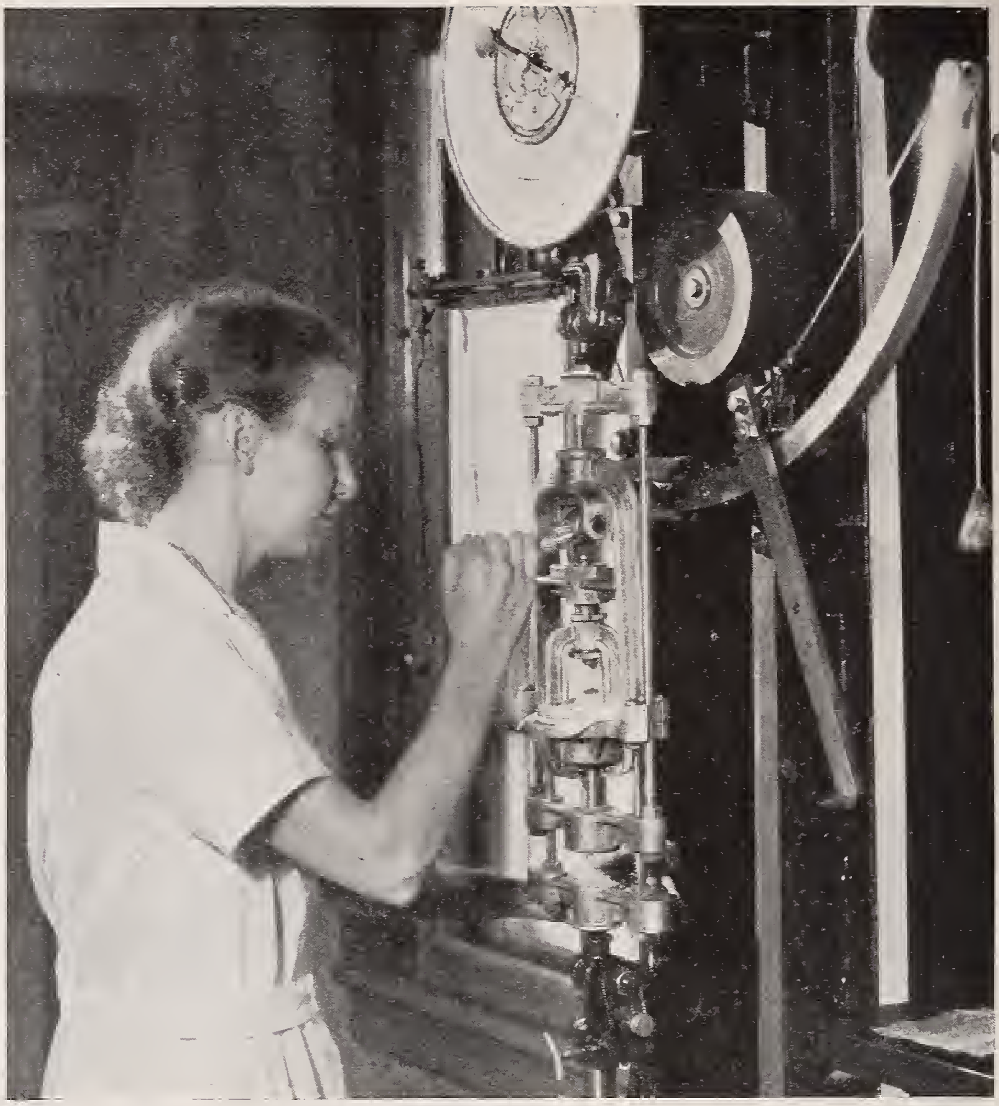
Softness and fluffiness in a new

towel are some indication of its absorptive power as it means that the yarns are not too tightly twisted and that there is a generous amount of pile. Often the luxurious feel of a towel is due to its long loops. From the standpoint of satisfactory service, however, too long loops are not desirable, as they are apt to catch and pull out. Loops about an eighth of an inch long are considered a good length.

Though heaps of pile mean good drying capacity, they are no indication of the wear one may expect from a towel. To get some idea of the durability of a towel, one must look beneath the pile to the foundation cloth. A firm ground is essential to hold the pile yarns in place and also to withstand the strain which the towel will get in use. The number of warp and filling yarns per inch is the precise information the consumer needs in accurately estimating the strength of the material. Lacking these facts, a sharp eye may be some help in judging the quality of the weave.

Most towels are woven with a three pick terry weave. "Pick" is just another name for filling yarn. Three pick terry means that there are three filling yarns to every horizontal row of loops. In a firmly woven towel, the pile should stay in place when the material is pulled through a tightly compressed thumb and finger.

Recently the Bureau of Home Economics made a study of sixty pairs of bath towels ranging in price from 14 cents to $1.50. All the towels were tested for the strength of their foundation cloth. In half of the towels studied, the cloth was as strong, or stronger, fillingwise as warpwise. In many cases, the greater strength was due to more filling yarns than warp yarns to the inch. There was also a wide variation in the number to the inch in all three sets of yarns. The lowest number of yarns per inch in both the warp and filling was found in the cheapest towels—those costing less than 35 cents.



When the Bureau of Home Economics tests the bursting strength of a towel, they fix a sample of the fabric in a frame which is placed in this machine. Pressure is exerted upward on the sample by a steel bar. Number of pounds of pressure it takes to break the fabric is recorded.

Strength and durability of a bath towel depend also on the quality of fiber used as well as on the firmness and balance of the weave. Linen is used for the pile in some "friction towels" and there are a few luxury towels on the market in which rayon is used, but cotton, because it is soft and absorbent and also launders well, is the chief fiber used in turkish toweling.

Single strand yarns (fibers twisted into a single thread) and two-ply yarns (two strands twisted separately and then twisted together) are used in weaving towels. For strength it is especially desirable for the ground warp to be made of two-ply yarns of good quality fiber, as it is this set of yarns which get the heaviest strain in both the weaving process and when the towel is in use. When the towel goes puffy in places and the pile loops stretch out, it is often due to breaking of a weak ground warp. The quality of yarn may be poor or not enough yarn was used in the warp to give it the necessary strength. For uniform wear, the ground warp should be at least as strong as the filling.

Good selvages on towels are important as they get hard wear at the edges. A selvage making for a firm resistant-to-wear edge is one in which every filling thread is wrapped around the last warp thread. When the outside warp yarn is secured with only every second or third filling thread, frayed edges may be the result after a little use. Towels, usually those in the lower price range, are sometimes woven on wide looms and then cut lengthwise. The raw edges are either lockstitched or hemmed. Neither type of finish is as durable as a firm selvage.

Usually the ends of a towel are finished with a hem. All rough edges should be well turned under and the corners should be securely fastened. If the towel has a plain border, one-fourth of an inch turn-in is satisfactory, but if the towel is all terry fabric then there should be a deeper hem. By holding the hem up to a strong light one can usually see how much of the raw edge has been turned under.

Until a few years ago, a turkish towel meant a white towel. Today, they come in many different shades and color combinations. The consumer who goes for rainbow shades in bath towels should also be sure that they are color-fast to washing. Pastel shades, especially tempting when new, may go gray after a few launderings, unless the dyes are fast.

Gay borders on towels give a festive air to the towel rack. But in buying new towels it is best to examine the decorative ends for their practicality as well as their attractive design. Corded and embroidered borders have a tendency to shrink more than the terry material. The result is that the towel may pucker at the ends. Borders should be woven at the same tension as the foundation cloth. Also it is well to remember that the larger the plain border—the less drying area there is to the towel. It's the terry fabric which does the drying job.

When buying towels, one should be careful to get enough terry to do a satisfactory drying job. All towels shrink when first washed. Some may shrink as much as 14 percent in the first five launderings. After that they will keep their size. The size of the towels one buys should depend to some extent on the size of the person who is going to use them. For children a small or medium size towel is the most sensible as it is easier to handle. Many adults like the luxury of the extra large heavy towels. The member of the household who does the washing or pays the laundry bills undoubtedly will agree that large turkish towels are a luxury. Extra large towels are hard to handle on wash day, and if the laundry is done outside the home their increased weight means bigger laundry bills.

At one time, there were 96 different sizes of towels on the market, 74 of which were between 16 by 30 and 24 by 48 inches. In 1931 through the work of the Division of Simplified Standards of the National Bureau of Standards, in cooperation with the leading towel manufacturers, turkish towel sizes were reduced to six. Most towels sold today are small (16 by 30 inches and 12 by 26 inches), medium (20 by 40 inches and 22 by 44 inches), or large (24 by 46 inches and 24 by 48 inches). At least these are the usual sizes though actual measurements may vary from the accepted dimensions.

Bargains in bath towels do not always mean a saving in price per square yard of toweling. Sometimes towel specials are not from the regular stock. The merchandise may be offered at a cheaper price because

[Concluded on page 19]

A stop watch, a pan of water, and some measuring instruments are necessary equipment in a laboratory test of the rate at which a towel absorbs water. The distance that the water moves along a strip of towel within a specified time gives a laboratory expert a measure of the towel's absorptive quality.

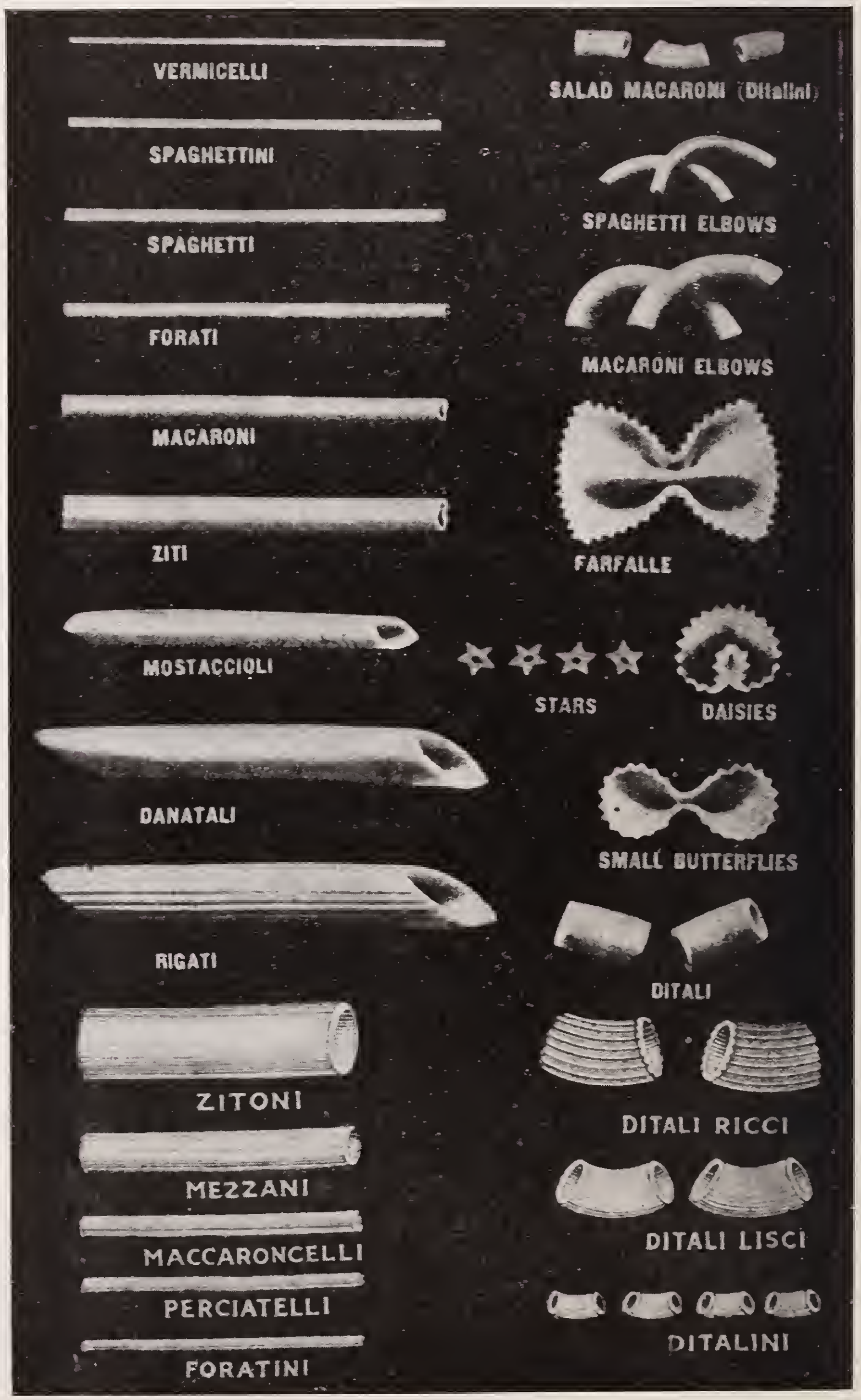
Facts about one of the foods that rates tops in fuel value

MACARONI—to Your Taste

Less than 40 years ago, a Department of Agriculture scientist returned from Russia with sacks and sacks of durum wheat seed, one of the hardest wheats known, with flinty and translucent kernels. If it was tough enough to grow in the black fallow of south Russia, he guessed it ought to stand up on the similar soil, against the equally hard winters, of the American plains. It did, and soon American farmers were gathering in great yields of durum. Beginning with nothing but a cerealist's experimental seeds at the turn of the century, American production of durum reached a peak in 1928 of almost 100 million bushels. Since then, drought and rust and a shift of acreage into bread wheat have cut down the crop. During the past five years, we have averaged some 17 million bushels of durum a year, almost all from North Dakota fields; and during years of low yield, American semolina mills have imported durum from Canada.

Semolina, preferred ingredient in the manufacture of macaroni, is the purified middlings—more coarsely ground product than flour—of durum wheat. Semolina has more gluten (the elastic protein which forms gum for farm boys and girls who chew wheat) and less starch than the flour of bread wheat.

Also in wide use for macaroni products is farina, purified middlings of hard wheat other than durum.



Some manufacturers use flour, either alone or in combination with semolina, farina or both.

The man who brought durum wheat back from Russia heard skeptical Dakota farmers call it "macaroni wheat." So he worked to build up its market by making macaroni an American dish. The quality of macaroni he ate in hotels seemed to him, over 30 years ago, the great obstacle to the food he was boosting. "The most common form in which macaroni is served in this country is a very white, pasty, doughy mass of sticks, served in dilute tomato sauce," he lamented. "The most enthusiastic lover of macaroni would have little if anything to do with a dish of that kind. It is very little wonder there are few converts."

Today macaroni, spaghetti, vermicelli, noodles, combine to make an American industry which nearly reaches the 50 million dollar class. With units ranging from home size to large modern plants, the industry in 1935 produced 600 million pounds and no one knows how many miles of its variegated products. Volume of production was second only to that of Italy. But the average American—if there were such a mythical consumer—would be discovered by the statisticians to be eating only 4½ pounds of macaroni a year to the average Italian's 50 pounds.

Macaroni itself comes in the shape of hollow tubes, about one-fourth of an inch in diameter. Sticklers for form tell us there are different names for all the different widths. It if is only $\frac{3}{32}$ of an inch in diameter, call it "forantini" or "maccaroncelli"; if it is as big as half an inch in diameter, say "zitoni." In between these two there are innumerable sizes, with ringing names all.

Solid rods—no holes in the middle—are spaghetti, about $\frac{3}{32}$ of an inch in diameter; and vermicelli, only a third as thick.

Spaghetti, vermicelli, macaroni, differ from one another only in form; all can be made from the same dough.

Noodles—or egg noodles—must have eggs in them, according to the Food and Drug Administration's definition: At least 5½ percent, by weight, of egg solids, obtained by the use of whole eggs, or egg yolk, or a mixture of these. If they are made without eggs, they must be labeled "plain noodles," or "water noodles." Standard shape is the ribbon.

Variants on these basic forms appear as alphabets, stars, bows, cockle shells, butterflies, daisies, elbows and hundreds of other shapes. Only limits to new and different styles are set by the fancy of the manufacturer and the response of the consumer.

As energy foods at a reasonable price, macaroni products rate high. Dry macaroni furnishes about 1600 calories per pound. This is equivalent to about 100 calories for ¾ of a cup of plain boiled macaroni. Macaroni contains some protein, but it is protein of cereal origin and not what the nutritionists call "protein of high quality"—that is, it cannot in itself be relied upon to build and repair body tissue.

But macaroni is not usually served alone. Bland and without pronounced taste of their own, macaroni products combine well with many other foods—with cheese and tomato sauce, with meats and fish, with vegetables and with eggs. Reckoning the food value of the final product must take count of the "fixings."

Egg noodles also have the slight added food value of their egg ingredients. The egg is a small proportion of the product. In noodles with the minimum 5½ percent egg content, an 8-ounce package contains about the equivalent of one whole egg. Noodles, therefore, will be chiefly valuable for their calories, and not as a substitute for eggs in the diet.

For consumers who wish to consume but do not want to take time or trouble to cook, spaghetti comes in cans, with cheese or with tomato sauce. Some of these prepared products are cheaper than the equivalent amount of the same dish made at home; some are more expensive. Home economists' tests on a number of cans on the market showed that the home product, well cooked, ranked higher in quality—as measured by flavor, consistency, appearance—than the canned products examined. Biggest difference in favor of the home-cooked dish was in flavor. Of course, the nutritionists who dished up the home-cooked product knew enough not to overcook or otherwise ruin the spaghetti.

No consistent tie-up between price and quality could be found among the prepared spaghettis. Cheaper cans often contained a better product than the more expensive ones.

Yellowness is, by commercial custom, the first criterion of desirable macaroni in the raw. Certain strains of durum wheat are richest in the prized yellow. Under the standards of the Food and Drug Administration, no artificial coloring matter may be used to touch up white or dull gray macaroni or noodle products in interstate commerce. Yellow cellophane wrappers are likewise frowned upon as an obvious attempt at deception. Consumers should read labels to make sure they do not get "plain" or "water noodles"—without that egg content—unless they want just that and pay accordingly.

Consumers' only real test of macaroni is in the cooking. Good macaroni will keep its tube shape when boiled, while it swells up to twice its original size. It will be firm but tender, not pasty and sticky. Poor quality macaroni will emerge from boiling with a "starchy," "floury" or "musty" taste. Best results come from cooking in salty water.

Pointers for thrifty household buyers of tools that will take some of the drudgery out of keeping clothes clean*

HOUSEKEEPERS who struggle through indigo Mondays and only slightly paler Tuesdays in ill-equipped, ill-planned home laundries know what it costs to make "it all" come out in the wash. Primitive laundry methods take a heavy toll in time and energy, two capital assets of the homemaker. If human conservation is worth the trouble, modernizing home washing technique is one humble place to start it.

First, say the household engineers who know about such things, look to the place where the laundry is to be done. Can enough light and air get into it? Can spilled water drain off easily? Is the equipment arranged so as to save steps and too much bending? Like an efficiently planned factory, home laundries should have their equipment arranged in logical sequence.

Basic equipment for any home laundry, of course, is the washing machine. Before the Rural Electrification Administration started its big job of pushing power across the countryside into farm homes, almost half of the farm families in this country, it is said, had to do their laundry out of doors. Now, as power arrives, washing goes indoors and almost always the initial purchase of the farm family with electricity is an electric washing machine.

Purchasing power machines is poor economy unless you know what it is you want and whether you are getting it. Careful buyers read labels, and labels should tell not only the name of the maker, the serial number of the machine, whether it is for direct or alternating current, and if the latter, the number of alternating cycles for which the machine is planned, but also the voltage and wattage rating.

Two jobs are expected of a washing machine: First, that it wash clothes well without wearing them out; second, that it wash enough clothes at one time.

Capacity is measured in pounds of

**The first of two articles based on a bulletin prepared by the Textiles and Clothing Division of the Bureau of Home Economics on "Methods and Equipment for Home Laundering" (Farmers' Bulletin No. 1497). This valuable publication can be obtained for 5 cents from the Superintendent of Documents, Washington, D. C.*

Equipping the Home Laundry

clothes or number of sheets. Check the weight of your weekly wash instead of hazarding a guess as to the size of machine you want. Overloading is hard on clothes and machine. Washing efficiency depends not only on design but also on the soap used, on water temperature, on types of clothing and soil, on careful operation of the machine. Maximum washing time should be stated on instructions and observed in operation.

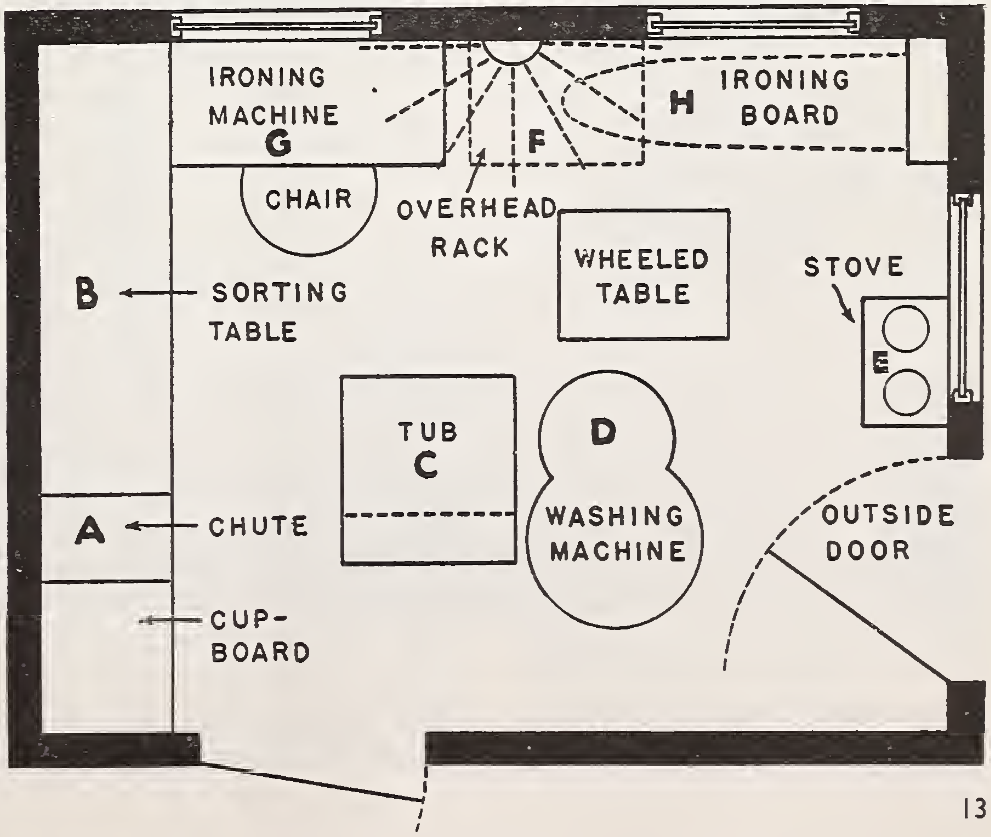
Ultimate costs should be balanced against the initial cost before you buy. Find out what it will cost to operate a machine; how durable it is; how accessible a repairman is. Both the material used in the machine and the way it is put together determine its durability and safety. Good steel or similar material should go into the framework, and be welded well and braced. Watch out for sharp edges of metal on which clothing or fingers may be torn. The outside of the machine must be electrically separated or insulated from any and all electrical connections. Wires, also well insulated, should be wrapped in thick flexible rubber. Connections and wire should carry a written guarantee for a specified time.

The tub itself should be of solid construction, safe against chipping, peeling, rusting, corrosion, or staining by alkali in water. Nickle alloy and stainless steel, best materials for use in a tub, are usually beyond the reach of the average budget. Efficiency shortcomings of other materials—such as porcelain-enamel and aluminum—must be balanced against their lower costs. Examine carefully the cover of the tub. Those that rate high are of rustproof, light material, such as steel or aluminum. They are highly polished as an aid to retaining the heat of the water as long as possible. Well-made ones are set in rubber to reduce noise and vibration when the machine is in use. Flexible arrangements for draining the tub are also a major feature to watch. A floor drain is best, but lacking this, a hose used as a syphon where piped water and sink drains are accessible will do the job almost as well.

So much for electric washers. For many households the cost of such machinery is beyond reach, but household engineers give tips to them, too. When washing must be done by hand, they say, wash tubs should be of a durable material easy to clean. Slate, soapstone, and enameled iron meet these standards. See that the tub is set high enough to minimize the amount of bending necessary. If possible, have the tubs installed where hot and cold water faucets can empty directly into them. If this is not possible, then a rubber hose connection to the nearest outlet can be substituted. Washboards should be of corrugated tin or iron, or rustproof stainless metal or glass. They should not come above the top of the tub and should be free of dangerous rough edges or sharp points that may catch fingers and clothing alike.

Important as the washing machine or wash tub is the wringer. Examine it closely to see if it has a safety feed device as a protection against the fingers or clothes of the operator getting caught in the rollers. Power wringers should have an automatic release that cuts the current and separates the rollers if the operator's hand is caught or if too bulky fabrics put an excessive strain on the rollers. Reversible drainboards and rollers mean added efficiency for the operator. "Balloon" type of rollers prevent injury to buckles and buttons, and do not subject the fabrics to as much wear as the hard rubber types. Power wringers should be adjustable in different positions; hand-operated ones should have adjustable

Bureau of Home Economics' experts designed this lay-out of a model home laundry (10½ by 8 feet). The soiled clothes go from the bottom of the chute (A), to the sorting table (B), then to the set tubs for soaking (C). From here some are put in the washing machine (D), while clothes for boiling go to the stove (E). An overhead rack (F) for drying is placed near open windows. Flatwork and other pieces can be ironed with the ironing machine at (G); hand ironing can be done on the folding board (H). A small wheeled table can be moved about for various jobs.



clamps that will hold the wringer firm.

More expensive machines are equipped with the modern "spinner" driers. These remove a larger proportion of water than the wringers, save time, and reduce breakage on buttons and wear on clothes. Housewives fortunate enough to have one of these machines should take care not to overload the drier and should see that the clothes are distributed evenly in it.

Wringers, like machines, should be sturdily built. All moving parts should be encased as far as possible to guard against dirt and injury to the operator. Ask for specific lubricating instructions so that you can give proper care to the complicated mechanism. Remember that too much oil can be just as harmful to a machine as too little.

Air and clean thoroughly machines, wringers and tubs after each time they are used. Use only very fine scouring powder for cleaning the metal parts of the machine. Hot vinegar or a solution of soapsuds and ammonia will remove obstinate stains. Rub the steel or iron frame with oil occasionally to prevent rusting. Wringers should be wiped completely dry. A cloth moistened with a few drops of kerosene will remove stains on the rollers, but the kerosene should be washed off the rubber immediately.

Small, low-set stoves for boiling clothes and other purposes are a boon to the home laundry. If possible, combination stoves which can be used as water tank heaters also should be installed. Those equipped with three burners are most efficient for boiling clothes and preparing starch at the same time. Stainless steel and copper wash boilers will give the best service; the more economical tinware boiler with copper bottom and rim is almost as good. Tinwear boilers must be dried carefully each time they are used as a check against rust. In purchasing a boiler notice whether or not it has a faucet at its base to ease the job of emptying it.

Starching utensils can usually be recruited from the kitchen, but a new set avoids any worry over rust or stains. The equipment should include a saucepan, a spoon, a measuring cup, a strainer, and a large pan or pail for mixing the starch and dipping the clothes.

Drying of clothes should be done in the fresh air and sun in the out-of-doors. Suburban dwellers with plenty of space in their backyards can install "pulley" lines made with cotton or hemp rope, or galvanized or copper wire. Wire lines are more permanent but should be wiped with a damp cloth before using and guarded against rust. Boil a new rope in soapy water for a few minutes to soften it. This also gives it longer life.

For urbanites with cramped yard space a revolving outdoor drier is most efficient. On rainy days a wooden frame in the house equipped with ropes and pulleys for lifting is a good substitute.

Time has not improved on the old-fashioned clothespin. As long as it is made of sound smooth wood it will serve the housewife long and well. Those with springs are of better quality, but corrode easily. Putting clothespins in a bag or basket hooked onto the line can speed up the job of hanging the clothes.

Curtain stretchers can be of the standard frame type or can be made at home by winding strips of wood with heavy cloth to which the curtain is pinned. Simpler still is the method of pinning them to a clean sheet stretched over a rug.

Put dirty clothes in laundry bags which may be washed with the rest of the laundry. Enameled hampers which can be easily wiped out are almost as good. For carrying the clean clothes to and from the line a basket lined with washable oilcloth or heavy paper will prevent dirt and moisture soiling the laundry.

Final chapter in this saga of making shirt, sheet, and handkerchief look fresh and clean is the ironing. The more modern presser and rotary types of ironing machines have been finding increasing favor among housewives whose weekly wash runs high. These practically eliminate fatigue in pressing clothes, and, according to experts, cut approximately 20 percent of the time required for hand operated irons. Both operate most efficiently when equipped with automatic heat control. The presser type, a modification of the old-fashioned flat-iron and ironing board, should exert anywhere from 300 to 600 pounds of pressure and should have variable heat controls allowing for a range from 200 to 500 degrees.

Rotary types, operated completely by hand and foot levers, require more care in purchasing. The pressing surface of the "shoe" (presser) should be of highly polished rustproof and scratchproof metal that is a good conductor of heat. Notice whether the back of the "shoe" is insulated to reflect the heat forward to the pressing surface. It should be well protected against leakage of electricity. The roll should be reinforced at the ends and well padded. Ask whether clothing can be arranged on the roll easily without danger of burnt fingers. Is your laundry small enough to use the usual 26 inch roll, or do you need a larger one? Is the shoe well supported and well braced? Are there adequate safety devices?

These are but a few of the questions the housewife should ask herself when she purchases a machine. Decide before you purchase, the type and size machine best suited to your needs. The machine should be guaranteed for a definite length of time

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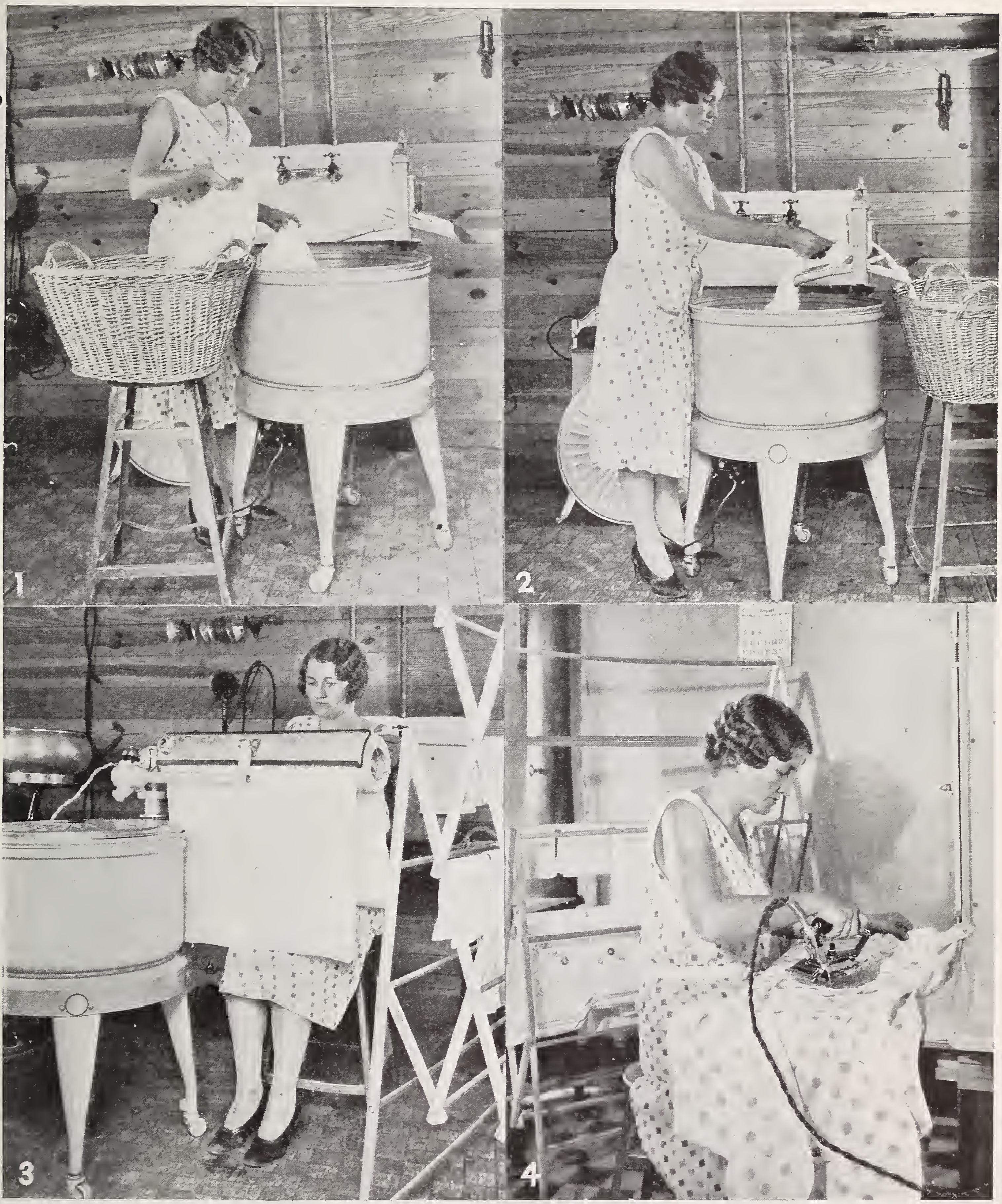


Lessening the burdens of "Blue Monday" and adding hours of free time for the launderer is accomplished in this household by both modern machinery and arrangements that reduce tiresome bending. In (1) the laundry basket is conveniently placed on a high stool that can be moved about on casters. The washed clothes in (2) are put through a power wringer equipped with safety features and a reversible drainboard. Ironing is speeded up (3) with a modern roller presser. The adjustable iron (4) allows for varying the heat needed in pressing different kinds of fabrics. Note the convenient rack on which the newly-ironed laundry is hung.

Your Food Supplies & Costs

Downswing in retail food costs which started last September continued at an accelerated rate from mid-December to mid-January as costs dropped three percent. This marked decrease resulted from sharp price reductions in eggs, dairy products and meats, and slight declines in all other groups except fresh vegetables. Since mid-September the cost of food in the consumer's market basket has moved down 6½ percent and returned to levels that prevailed in early 1936. A 16 percent drop in meat prices has been the major factor behind this larger than seasonal downswing.

On January 18, the retail cost of food stood at its lowest point for this month since 1935. Sugar, cereals and bakery products, and dairy products were the only food groups which were not below their January 1937 level. Meat costs were the lowest for January since 1935, while eggs and fresh fruits and vegetables respectively were at their lowest for this month since 1934 and 1933.

Index of retail food costs on January 18 as reported by the Bureau of Labor Statistics stood at 80.3 percent of the 1923–25 average, or five percent lower than a year earlier. In mid-January 1933 the index was 62.6 compared to 102.7 on January 15, 1929.

Changes in food costs in cities along the Atlantic Coast, where the largest declines occurred, were slightly greater than the average drop for the United States while in cities along the Pacific Coast the decline was only 60 percent of average.

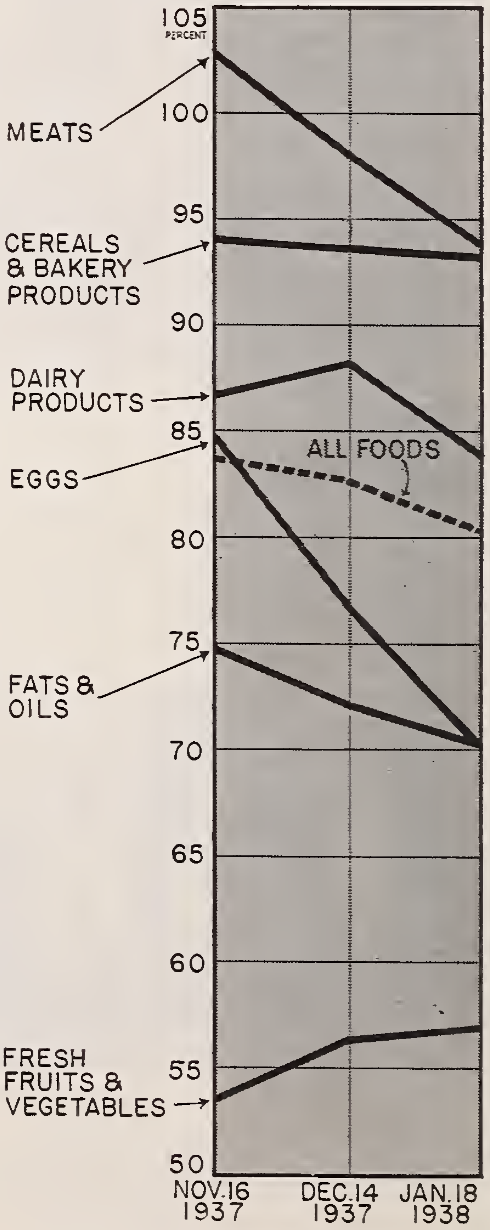
Course of food costs in general probably will continue downward through March with the rate of change influenced by business conditions. Prices of beef, butter and eggs, three important items in the market basket, are expected to move down and to remain under a year ago. The declines may not be as large as recent changes. Apple, orange, poultry, potato, and lamb prices are not expected to change much, even though these items usually advance at this period of the year. Poultry probably will be the only item in the group retailing above a year earlier. Seasonal advances are in prospect for onions and cabbage until substantial supplies from the early crops grown this year are available in April or May.

Meat prices continued to tumble downward from December 14 to January 18 with sharpest changes in beef steaks. Lamb prices registered their first substantial decline since hitting their peak last fall. Recent price declines have cancelled all of the increases of last summer and fall, and carried prices back to 1935–1936 levels. On January 18 beef steaks and fresh pork were selling at their lowest price since January 1935, while beef roasts were at their mid-1936 level. Bacon and ham prices, respectively, were the lowest since April and June 1935, but lard hit its lowest price since August, 1934. Lamb cuts, however, were retailing slightly above a year ago.

Since reaching their peak last fall, prices of fresh pork and beef steaks, respectively, have dropped 14 and 12 cents per pound, or about double the decline in ham, becon, and beef roasts. Price declines per pound from December 14 to January 18 were as follows: Steaks 3¼ cents, roasts 2½ cents, fresh pork and sliced ham 1¾ cents, lamb cuts and bacon 1½ cents, and lard 1 cent.

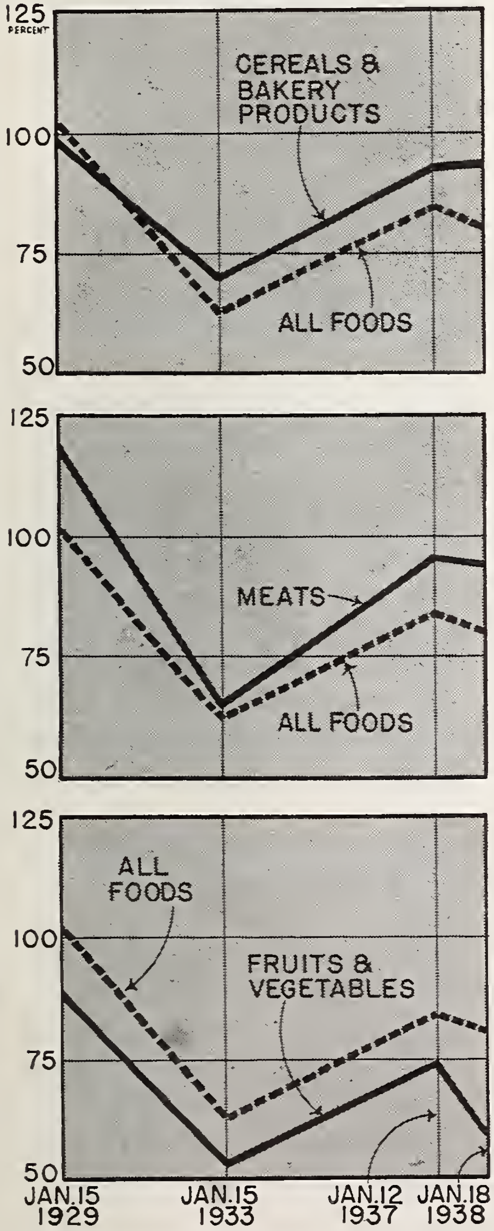
Decline in better grade beef prices during the next few months probably will be smaller than anticipated in view of the sharp declines which

A CLOSE-UP OF FOOD COST CHANGES
1923-1925=100



have occurred already. During the first week of February, choice and prime grade steers at Chicago averaged about $8.50 per hundred pounds, slightly less than half their peak price last October. The sharp decline in better grade cattle prices has narrowed the margin between better and medium grade beef. In early February this margin was considerably below average, compared with the largest margin on record last fall. Despite prospects of only slight additional price declines, slaughter of better grade cattle still is expected to increase seasonally during the spring and summer.

A PERSPECTIVE OF FOOD COST CHANGES
1923-1925=100



Lamb price outlook also has shifted. It now appears that prices will not advance much during the next few months, and that retail prices may ease off a little more. From December through April lamb prices usually move up as grain fed lambs move to market. This year the price trend through early February has been downward.

Frozen and fresh dressed poultry supplies during the first half of 1938 are expected to be less than a year ago. Prices probably will continue higher than in 1937, but the advance during the first half of 1938 may be relatively small. Recent high prices have been the result of a contrary and seasonal price upswing during the last half of 1937. During the month ending January 18 retail prices of roasting chickens jumped one-half a cent per pound, but they were six cents above a year ago, and the highest for January since 1930.

Butter prices probably will decline more than usual from January through June. Larger production and lower prices than a year ago are in prospect. On January 18 the retail price of butter was five cents a pound below December 14, and about one-half cent a pound under a year ago.

Potato supplies during the first half of 1938 may be about a fifth more than a year ago, if average yields are obtained in new potato producing areas. Bulk of supplies until May come from storage holdings of late grown potatoes, which on January 1 were about a fourth above January 1, 1937. In view of large supplies, prices of old potatoes probably will show little change during the next few months. New potato prices, however, will trend downward as supplies increase. On January 18 retail potato prices were unchanged from the previous month and almost half their 1937 level.

Cabbage and onion supplies during the first quarter of the year come primarily from storage holdings of late grown crops, and consequently are expected to be less than in 1937. Cabbage holdings on January 1 were 40 percent under a year ago, and the smallest on record. Onion holdings were a fifth below January 1, 1937, and the smallest since 1935. Retail prices of both items moved up around one-half cent a pound from December 14 to January 18. On the latter date onions and cabbage respectively were at their highest January level since 1932 and 1934.

Strawberry season swings fully underway in February. Strawberries move to market from January through June, with heaviest shipments and lowest prices in May. Florida is the sole source of supply until the latter part of March, when shipments move from Louisiana, the largest berry producing State. In May practically all the berry producing areas ship to market. Production in Florida is expected to be about a twelfth smaller than a year ago. The season in this area is almost a month late due to December freezes and this may cause a bunching of shipment in February and March.

Retail orange prices have dropped to low levels, and in mid-January appeared to be at or close to their low point for the season. A smaller than usual price advance is expected until the end of the marketing season next fall. From December 14 to January 18 retail prices dropped 3.5 cents a dozen. On the latter date they were the lowest since March 15, 1933.

Average retail white bread prices per pound have remained unchanged since June. During this same period retail flour prices have gone down three-quarters of a cent per pound. On January 18 bread prices remained at their highest level since September, 1929, but flour prices were the lowest since July, 1933.

CRUSADE FOR FACTS

[Continued from page 6]

scores of each tester to arrive at a consensus of opinion.

Consumer groups which want to grade other kinds of canned goods besides cream style canned corn can ask the Bureau of Agricultural Economics, U. S. Department of Agriculture, Washington, D. C., for free copies of standards for grades of other kinds of products. Some grades have technical requirements which can be determined only with special equipment. In other cases the requirements are stated in general terms which demand the judgment of a grader who has been given a careful course of training before he is allowed to do official work.

Official graders of canned fruits and vegetables are located in 16 cities throughout the United States. The Bureau of Agricultural Economics will be glad to send the names and location of graders. If your group is located in or near one of these cities you may be able to arrange a demonstration by an official grader.

DENTIFRICES

As U. S. Government standards for grades of canned goods serve as guides for rating canned goods, Federal specifications are guides to checking other types of consumer goods. For illustration, let's take the new Federal specification for Dentifrices, No. FFF–D–191, available from the Superintendent of Documents, Washington, D. C., for 5¢.

Some of the tests included in this specification must be made in a technical laboratory, but the abrasion test can be performed by anyone. This test is particularly important to anyone who wants to avoid a dentifrice which scratches glass. When the National Bureau of Standards tested 25 dentifrices it found that 10 checked by this technique did scratch glass.

To test for abrasion the specification prescribes: "Tooth paste shall be placed on glass and rubbed with a copper alloy similar in composition and shape to the five-cent coin which has previously rubbed on glass without scratching. The glass shall be the usual soda-lime grade such as is used in non-corrosive microscope slides." Non-corrosive microscope slides may be secured from any company selling scientific apparatus. Ordinary window glass may be tried out if microscope slides are not easily available, but as window glass is not a standardized product, the results will be less reliable. A 5-cent coin may be used as the rubbing agent. Wash the glass after it has been rubbed and hold it up to the light at different angles. Scratches refract the light and are readily seen.

TEXTILE FIBER IDENTIFICATION

Complete identification of textile fibers requires technical training and laboratory equipment. There are, however, a few interesting experiments which any consumer may perform.

From a small swatch of the material to be tested, unravel crosswise and lengthwise yarns. Untwist these yarns to see if they are made up of strands of two different kinds of fiber, and if so test each strand separately. You may find that one ply (single strand) yarns are made up of several fibers, and in this case you cannot apply the tests suggested here.

Apply a lighted match to an end of the yarn to be tested. Notice the way in which the material under test burns. Blow out whatever flame there is and smell the smouldering yarn. Material that flames readily and gives a smell like burned paper will be rayon or one of the vegetable fibers, e. g., cotton, linen, hemp, jute, etc. Cellulose acetate burns a little less readily and the yarns burn back, like sealing wax. The ends of the extinguished cellulose acetate yarns will be hard black globules, and the fumes will have a faint vinegar-like smell.

Silk and wool yarns will burn with difficulty and in burning will smell somewhat like burned feathers. If the silk is weighted with tin or lead, the metal weighting will not burn but will remain as black ash. The ash of a heavily weighted silk textile, if burned in the piece, will have the form of the original.

It may be well to have a "control" test to check your results; that is, when you think you have a fiber identified, check your results against a piece of cloth whose composition you know.

HOUSEHOLD EQUIPMENT

Have your group bring in their electric bread toasters for comparison at a meeting devoted to the testing of household equipment. Place the bread in the holders but do not turn them up into the toasting position yet. Plug in the toaster and let it heat for exactly one-half minute. Turn the holders up into the toasting position for exactly one minute. Remove the toast and repeat the experiment with another toaster. Make careful comparisons of the results. Comparisons of convenience features and strength of construction may also be included in the check list.

Stainless steel knives may be immersed in water for several weeks to see if they corrode.

The heat retaining efficiency of vacuum bottles may be checked by weighing into each bottle a definite amount of heated water and checking the temperature at two-hour intervals with an accurate thermometer.

You can get some interesting information about the efficiency of the electric irons owned by the members of your group by conducting a scorch test. Have members owning different makes of irons bring them to a meeting. Secure sheets of white blotting paper and cut them into sizes slightly larger than the irons. Dry the blotting paper thoroughly. Place the paper on a sheet of asbestos or other non-combustible surface, plug in the cold iron and leave it on the paper for exactly 10 minutes. Repeat with the other irons. The foot prints of the irons will give a picture of their relative heating efficiency. Some irons will thoroughly blacken the whole area covered by the iron. Others will show the outline of the heating element, while some will make little impression. Any group wishing to make a detailed study of electric irons will find useful "Selection and Care of the Electric Iron," by P. B. Potter and F. H. Bass, Bulletin 307, obtainable free of charge from the Virginia Agricultural Experiment Station, Virginia Polytechnic Institute, Blacksburg, Virginia. This bulletin contains a picture showing the results of a scorch test of 15 irons.

WHEN YOU BUY BATH TOWELS

[Concluded from page 9]

it is not the regular size. It has been cut short or woven narrow or is imperfect in some respect.

The same qualities that make for satisfaction in bath towels hold for wash cloths. The foundation cloth should be firm to hold the loops securely in place. The loops, however, may be a little more twisted as the cloth is used to cleanse the skin rather than dry it. Edges should be well fastened and if the material has a border it should be woven at the same tension as the foundation cloth. Sometimes a knitted terry with loops only on one side is used for wash cloths. Its soft texture is preferred by some people. However, the knitted terry is inclined to stretch out of shape and become stringy.

For more information on bath towels and wash cloths, write to the Superintendent of Documents, Washington, D. C., for Farmers Bulletin 1765, Guides for Buying Sheets, Blankets, Bath Towels, price 5¢.

EQUIPPING THE HOME LAUNDRY

[Concluded from page 14]

to be shockproof. It should be marked with the type and serial numbers, manufacturer's name, whether it is for alternating or direct current, and what the rating in volts and amperes or in volts and watts is. The shoe should be kept clean by rubbing with a wet cloth and wiped dry. When it is starting to heat, rub it lightly with paraffin or beeswax to prevent scorching.

Electric hand irons more widely used than the others, have kept up with the times in streamlining and automatic operation. Discriminating housewives today are able to purchase at a moderate cost irons which can be regulated by a mere twist of the switch for use on various types of fabrics, be they rayon, silk, wool, cotton, or linen. Thermostatic control prevents overheating of the iron through automatic control of the current. The heat of the iron should be centralized in the actual pressing surface, which should itself be smooth, rustproof and scratchproof, and highly conductive of heat.

Many irons are made with special grooves for ironing under buttons, thumb rests and with large, specially shaped handles designed to allow ironing in difficult places such as sleeves. Irons vary in weight from four to eight pounds, the tendency being to make them lighter. The 800 and 1000 watt ratings are preferable to those rated at from 600 to 660 watts.

Ironing boards are most efficient when from 31 to 32 inches from the floor. They should be padded with double-faced cotton flannel used for silence clothes on dining tables, or with an old blanket. Enough material should be used to give the surface spring without making it cushiony. Old sheets may be used for covering, but new unbleached sheeting, not an expensive item, is better. New covers should be washed to remove all starch and other finishing materials. They should be changed at the first sign of scorch because of the danger of staining fabrics ironed on the covers. Fireproofing coverings is also a wise safeguard. (See "An Ounce of Prevention," Consumers' Guide, January 31.) The boards themselves are most efficient when built into a special wall cupboard with a shelf for the iron, sponge, and other small equipment. Apartment dwellers especially will find such a space conserver helpful in overcoming the restrictions of most apartment kitchens.

Study Questions For This Issue

1. *What is a federal specification?*
2. *What are the six characteristics of canned corn which should be examined in attempting to grade such a product?*
3. *What feature in the construction of a bath towel determines its absorptive power?*
4. *What information about the weave of a bath towel do you need to help in judging its wearing quality?*
5. *What is the food value of macaroni?*
6. *What are the regulations of the Food and Drug Administration regarding the coloring of macaroni or noodle products?*
7. *What are four features of an electric washing machine which should be carefully examined before purchasing? What four of a wringer, an ironing machine?*
8. *How much have food prices decreased since last September? What is the main reason for this decrease?*

In This Issue

Page

Crusade for Facts 3

FACTS—that's what consumers are after these days! Facts that answer such questions as these: What is it made of? How good is it? What are its best uses? How long will it wear? We give here some tests of common articles which can be made in clubs and schools, at meetings, in homes.

When You Buy Bath Towels . . . 7

Experts of the Bureau of Home Economics tell you how to spot the best values in this household necessity.

Macaroni — to Your Taste 10

Facts about one of the foods that rates tops in fuel value.

Equipping the Home Laundry . . 12

Pointers for thrifty household buyers of tools that will take some of the drudgery out of keeping clothes clean.

Your Food Supplies and Costs . . 16

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WRITING RULES FOR TRADE

CONSUMERS' Guide

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Consumer passion for facts is focusing these days on several fronts. One is a demand for better identification of the fiber content of fabrics. Increasingly, consumer organizations are urging on industry the necessity for defining the meaning of words used to identify fibers and for standardizing the use made of these words in labels, advertisements, invoices, and other markings. At the forefront of this crusade are some consumer organizations which look with favor on the trade practice conference technique for achieving consumer-industry agreement on better identification. This technique, they hold, gives both industry and consumers the opportunity to present their cases before an impartial government agency and to gain the moral support of a government ruling based on the common interests of sellers and buyers of goods. Six months ago, largely because of consumer demand, trade practice rules for rayon were issued by the Federal Trade Commission. As this issue goes to press, the Commission will be holding trade practice conferences for the silk and wool industries. Because of this lively interest in the role of the Federal Trade Commission in the working out of standard practices for fiber identification, we present on page 3 an article on "Writing Rules for Industry." This article attempts to explain the power of the Commission in the field of trade practice rules, their method of adoption, and the limitations on their authority.

Standardizing and simplifying wrappings is another point of attack on waste by industry that has possibilities for savings to consumers. Whether savings which may be worked out carry through to over-the-counter buyers depends.

Back in 1931 when the Department of Commerce surveyed 34 stores they found that these stores alone used each year 78 million paper bags of 188 different sizes, 20 million folding boxes of 262 sizes, nearly 8 million setup boxes in 1,084 various sizes, and more than 4 million corrugated boxes in 288 sizes. This department, in collaboration with retailers and manufacturers, estimated that standardizing boxes and bags could cut down the number used by one store by four-fifths and result in savings for all stores of "millions of dollars a year."

Now industry and government are getting to work in earnest on this problem of simplification. At a meeting in February, representatives of the National Retail Dry Goods Association and the National Bureau of Standards threshed over some of the knotty problems involved. These retailers intend to move ahead by lining up all the facts on sizes now used, the minimum needed, ways in which different types of commodities can be fitted into a few standardized sizes, suggestions to manufacturers on the use of these reduced sizes. They will explore, also, the advisability of promoting acceptance of standard wrappings through a trade practice rule from the Federal Trade Commission.

Profits of 11 flour milling companies were talked about in our article on "The Drama of Wheat," which appeared in the February 14, 1938 issue. "For the 6 years from 1929 through 1934," the statement was made, "they earned an average of $131,000,000 a year, an average return on the investment in their business of 8.25 percent." A large mistake in one figure was made in this sentence. While the rate of return was correctly stated as 8.25 percent, the amount of earnings should have been stated as an average of $11,000,000. We regret this slip.

Achieving maximum nutrition values is a matter not only of dollars but of sense, as most people know. Some families achieve no better than a poor quality diet on money that other families turn into a good balanced fare. The trick lies in knowing how to buy and how to use foods. To help consumers in the latter problem New York's Department of Markets conducts 3 cooking schools, one a kosher cooking class, in various parts of that city. There, experts loaned by WPA explain food values, plan meals, instruct in the preparation of foods, and actually cook meals. At the recent opening of the third school in Brooklyn, the Department's instructor prepared a 4-course demonstration meal costing 97 cents and feeding 6 persons, an average of about 16 cents a person. Less costly meals are also demonstrated. . . . This is one of various services this city department furnishes local consumers. Another is a morning broadcast reporting on foods which are particularly plentiful that day and, therefore, likely to sell at reduced prices. Headlined in their weekday morning broadcasts of 5 minutes are best buys in fruits and vegetables, fish, meats, and eggs, information on which is gathered by market scouts in the early morning hours before the broadcast. Information regarding this unique city consumer service can be obtained from the Deputy Commissioner of Markets, New York City.

WRITING RULES FOR TRADE

How the Federal Trade Commission works out with industry fair trade practice rules and what they mean to consumers

WITHOUT its Marquis of Queensberry rules, the manly contest of boxing is inconceivable. For the contestants in the bouts of business competition, there are no such universal yet detailed rules. But some 200 industries have, in collaboration with the Federal Trade Commission, written their own rules of fair competition. These are known as "trade practice rules."

Trade practice conference procedure, as the Commission has said, "permits an industry to make its own rules of business conduct; to establish its own *law merchant*," subject to the approval of the Commission as meeting the law and the public interest. Recently consumer groups, too, have taken an interest in the trade practice conference procedure of the Federal Trade Commission.

Ten not too simple words of Article 5 of the Federal Trade Commission Act of 1914 pronounced that *"unfair methods of competition in commerce are hereby declared unlawful."* The Commission was directed to prevent business—except banks, and common carriers subject to regulation by the Interstate Commerce Commission—"from using unfair methods of competition in commerce."

Congress purposely left the phrase wide open. Congressmen realized it would take all their time and a wealth of skilled economic and legal training to discover and define all the acts which at various times might constitute "unfair competition." That task Congress entrusted to the Federal Trade Commission, whose functions were to be both administrative and judicial. Final say as to what, under existing laws and the Constitution, is or is not unfair competition rests with the courts.

Attempting to deal with unfair competitive practices, the FTC has sometimes found such practices are not restricted to one or several firms within an industry, but may be characteristic of a whole industry. Business concerns have freely declared that the illegitimate practices of some of their competitors force them to choose between loss of trade and the use of what they agree are probably illegitimate methods. To get an entire industry—or the major section of an industry—to agree to rules of fair competition, the FTC developed its trade practice conferences.

The FTC's Trade Practice Division was established in 1926. Then interest grew in this method of what was called "industrial self-regulation." By June 1933, almost 100 agreements were in effect. Major interest then shifted to the National Recovery Administration, which administered trade practice sections in the NRA codes. Upon the invalidation of the NRA codes, the President

The Federal Trade Commission's varied activities—industry investigations, administration of the anti-price discrimination law and sections of the anti-trust laws, trade practice conferences—will soon be housed in this new building.

Popular-priced frocks and house dresses are subjects of two recent trade practice codes which seek industry agreement to eliminate trade evils. Through their codes manufacturers of house dresses and wash frocks hope to maintain "truthful and accurate descriptions of washability, color permanence, and shrinkage properties."

delegated to the FTC his authority to approve voluntary trade practice agreements. In 1936 Congress entrusted to the Commission for enforcement the Robinson-Patman Act of 1936 with its provisions for the prevention of price discrimination between buyers. About 60 industries have applied to the FTC for aid in establishing trade practice rules since the abandonment of the NRA. Industries applying for these rules during the last fiscal year had a total sales volume of one billion dollars.

Under the trade practice conference procedure, rules are developed by representatives of the industry, in collaboration with the FTC, and promulgated by the Commission, after opportunity for public hearing before any interested parties (including consumers). The procedure may be found outlined in the Commission's recent annual reports. (The Annual Report for year ended June 30, 1937, is available from the Superintendent of Documents, Washington, D. C., price 25 cents.)

Application for a conference may be quite "informal." Usually it comes from a trade association. Individual units of an industry may request a trade practice conference. The application sets forth the purposes of the proposed conference, ". . . the various unfair methods of competition, trade abuses, and uneconomic and unethical practices, alleged to exist in the industry."

The Commission then gives preliminary consideration to the application, and perhaps indicates revisions so that the proposals will conform to the law and the interest of the public. But, as a former member of the FTC has pointed out, "the Commission does not substitute its economic judgment for that of the industry."

When the Commission has made preliminary study and believes conference proceedings feasible and desirable, it calls a conference. Only persons financially involved in the affected industry may participate in the discussion and vote on resolutions at this stage. Discussion is not limited to the practices cited in the application.

Rules adopted at the conference then go to the FTC for approval. Before final action, the Commission releases the rules for a 15-day period, with public notice to interested parties to present suggestions or objections. A public hearing may be called. At this point consumers or consumer organizations may enter into the procedure, and state their case.

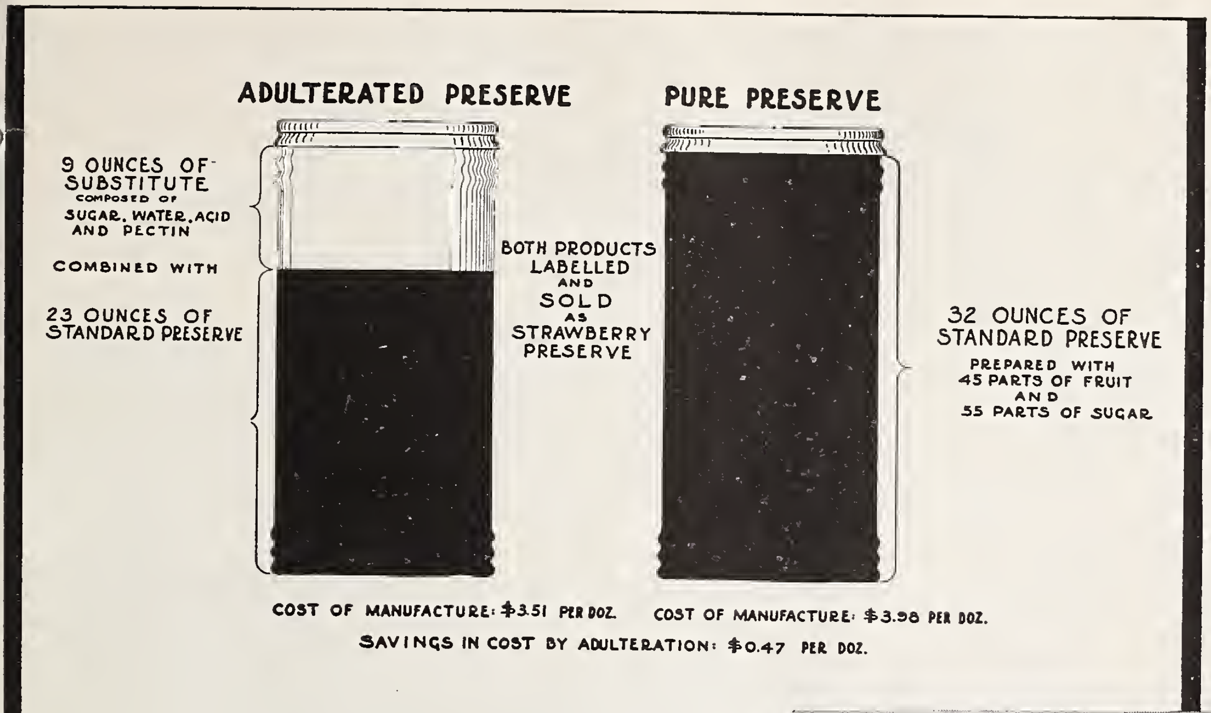
The Commission then gives final consideration to the rules. Once promulgated, the rules go to each member of the industry "together with an acceptance card providing opportunity to such member to signify his acceptance and willingness to observe the rules in the conduct of his business."

Two sharply distinguished sets of rules are embraced in these trade practice codes.

Group I rules are a kind of declaration by the *Commission* of unfair practices which it believes existing laws make illegal. In other words, such rules are definitions or reiterations of practices already frowned upon by the law. Group I rules are held by the FTC to be binding upon all members of an industry, whether or not they sign certificates of intention to comply.

Group II rules are a kind of declaration by an *industry* against practices which it believes to be unsound business methods. While they carry the moral support of government approval, non-observance of such rules is not a violation of law. Usually an industry will itself give Group II rules such enforcement as they get.

Nor is the actual work of checking violations of Group I rules accomplished by the Commission alone, with its limited investigating staff. Policing of all rules covering


ADULTERATED PRESERVE
PURE PRESERVE
9 OUNCES OF SUBSTITUTE COMPOSED OF SUGAR, WATER, ACID AND PECTIN
COMBINED WITH
23 OUNCES OF STANDARD PRESERVE
BOTH PRODUCTS LABELLED AND SOLD AS STRAWBERRY PRESERVE
32 OUNCES OF STANDARD PRESERVE
PREPARED WITH 45 PARTS OF FRUIT AND 55 PARTS OF SUGAR
COST OF MANUFACTURE: $3.51 PER DOZ.
COST OF MANUFACTURE: $3.98 PER DOZ.
SAVINGS IN COST BY ADULTERATION: $0.47 PER DOZ.

The housewife's recipe—half sugar and half fruit—is the basis of the industry's definition of a fruit preserve in a Federal Trade Commission trade practice rule. How chiseling demoralizes competition in the industry, is shown by the exhibit (above) used in a recent Commission proceeding against one manufacturer.

almost 200 different industries depends to a considerable extent upon trade associations who are interested in enforcement. Complaints of violations often come from aggrieved competitors. Demands for enforcement of Group I rules may also come from consumers.

If, on complaint of an alleged violation of a Group I rule, the FTC finds that the facts as stated give it jurisdiction—that competition in interstate commerce is involved, and that the public interest is concerned—it authorizes an investigation by its own examiners. Their report goes to the Commission, with recommendation either (1) to dismiss the case, if the facts indicate there has been no violation of a law over which the Commission has jurisdiction; or (2) to allow the company involved to sign a stipulation of facts and an agreement to "cease and desist" from the practices complained of; or (3) to issue a formal complaint.

If a complaint is issued, and the concern involved fails to answer, that is taken as admission of the validity of the charges; the FTC then issues an order to cease and desist from the practices complained of. If an answer to such an order is filed, testimony is taken before one of the Commission's trial examiners. Both the Commission and the respondent—the firm involved—are represented by attorneys. Report of the hearing goes to the FTC. Briefs are filed by both sides. Then the case is argued before the full Commission of 5 members. If the FTC finds that the charges stick, it issues a cease and desist order.

After a cease and desist order has been handed down, the respondent has a specified time in which to make report of compliance. If the firm fails to comply, the Commission can appeal to a U. S. Circuit Court of Appeals for enforcement of its order. The firm itself can appeal to this Court against the enforcement of a Commission order, and both sides can carry their case for final judgment to the Supreme Court. A fine or imprisonment is the penalty meted out to firms found guilty of contempt of a Court decision supporting the FTC order.

What are the definitions of unfair competition which are written into trade practice rules? Some apply only to transactions within the industry from producer to distributor. They do not directly come within the range of the ultimate consumer's observation, although they may affect the price or quality of goods finally reaching the consumer.

Group I rules often prohibit sales below cost "with the intent and with the effect of injuring a competitor, and where the effect may be . . . to unreasonably restrain trade." The term "cost" is not usually defined in any conclusive manner. Deviation from posted prices may be frowned upon; shipments without order condemned; misleading guarantees of quality forbidden. Price discrimination between purchasers is outlawed under certain circumstances.

Other practices generally condemned include bribery of customers' agents or employees; attempts to induce competitors' customers to break their contracts; defamation of competitors; threats of suit for infringement of patents "not made in good faith but for the purpose of . . . harassing customers of a competitor;" imitation of competitors' trade marks; shipment of goods which do not conform to samples submitted.

Rejected by the FTC was a code for retail automobile dealers, which would have required all dealers to sell cars at factory delivered prices effective in their territories and would have fixed the trade-in prices of used cars. Such a rule, the Commission felt, would have eliminated price competition among dealers.

Other rules more obviously claim the attention of alert consumers. Misbranding or misrepresenting a product is condemned—in general terms—in almost every set of rules for consumer goods. The recently promulgated rules for the rayon industry have been called a milestone in consumer protection, because they require that rayon products declare the presence of rayon. Not only is it an unfair trade practice to sell rayon yarn, fiber or fabric as being something other than rayon, but it is now declared an unfair trade practice to fail to say affirmatively—on invoices, labels, advertising, and sales promotion—that the material or product in question is rayon. Mixed goods which include rayon should have all the constituent fibers designated in order of their predominance by weight—"Rayon, Wool and Silk," for example.

Group II rules of this code declare it to be a "proper practice" for dealers to make "full and accurate disclosure of the proportions or percentages of constituents" of mixed goods; and suggest "disseminating, through tags, labels, advertisements or other publicity, accurate information as to the proper treatment, care and cleaning of rayon products." ("Trade Practice Rules for the Rayon Industry," available from the Federal Trade Commission, Washington, D. C., without charge.)

Fiber identification has been demanded by organized consumers. The pressure transmitted through retailers to producers is declared to have made possible the Group I rules in the rayon trade practice code. Other fiber-and-fabric identification rules are predicted, as the FTC has held trade practice conferences for the silk and wool industries.

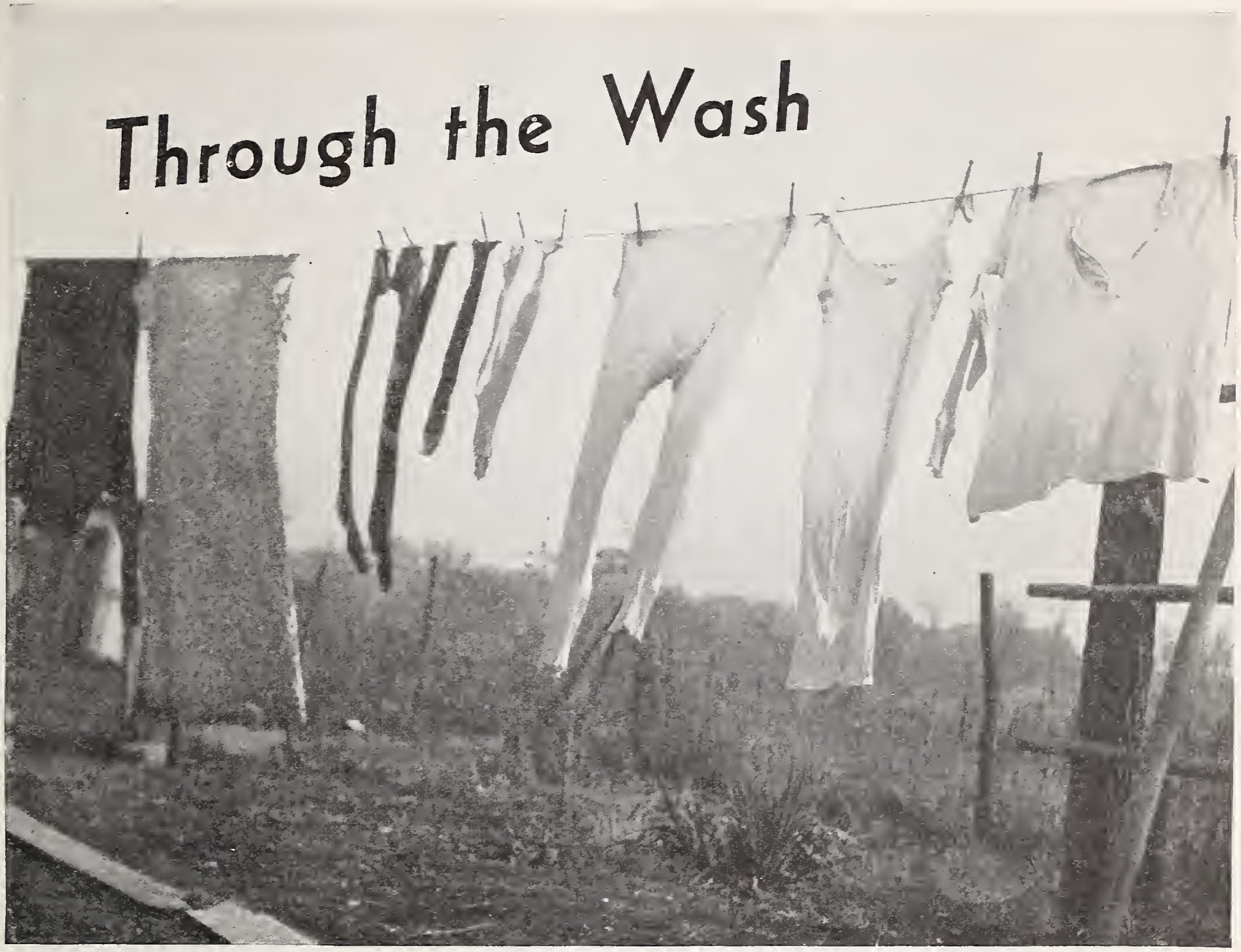
Few of the FTC codes now in force set any quality standards for consumer goods. The rules for the preserve manufacturing industry define fruit-and-sugar content in jams, jellies, preserves and apple butter, on the basis of the housewife's traditional one cup of sugar and one cup of fruit (commercially, 45 pounds of fruit to 55 pounds of sugar). These rules do not embody all of the minimum quality standards implied in the definitions of such products made by the Food and Drug Administration.

Such products containing less than

[Concluded on page 18]

Intelligent shopping at garment and piece goods counters will be easier now that the rayon industry, responding to organized consumers' demands, has agreed that rayon should be labeled as rayon. A trade practice rule issued by the Federal Trade Commission, embodies the agreement.

Through the Wash



Knowing wise rules for laundering can stretch both dollars in family budgets and the life of clothes

"Eye appeal" may rate tops with easily sold consumers in the market for fabrics and clothes, but stuff that washes well wins the votes of economical buyers.

So concludes one of the country's large dry goods associations from its nationwide poll of consumers on what they want in the way of purchasing information. The big question bothering women shoppers, the poll indicated, is how the fabric will stand up under the treatment of hot water, soap, and other standard household laundry chemicals. They want to know if the garment or material will come off the ironing board looking little different from the way it appeared on the display counter. And they want specific washing instructions with unusual or delicate fabrics.

Tub behavior of fabrics often varies with the fiber and weave of the material. No uniform rules on the best way to wash, therefore, are possible. Manufacturers are the surest source of information on the special handling needed for many of the newer fabrics. But the family launderer who knows how to use equipment and washing preparations can not only save fabric wear and tear, but also can help to stretch the family budget.

These pages have already described what to look for in purchasing laundering equipment. Now for a few hints on standard practice for wash days.

First step in preparing the laundry for washing is to sort it into individual piles. Separate the fabrics into five different groups: cottons and linens; hosiery; silks and synthetics; woolens; and curtains, blankets, comforters, and special articles. It is wise, too, to separate white fabrics from colored, and very dirty from slightly soiled. Turn all garments inside out. Mending all tears—except in the feet of hosiery—and removing stains before actual laundering will avoid later difficulties.

Soaking white cottons and linens, the bulk of most family washes, in soft lukewarm soapy water is effective in loosening dirt, lessening wear and tear, and as a time saver. Let the clothes soak in the water overnight, using separate tubs for the very dirty and for those only slightly soiled. A more effective way—but a more troublesome one—is to wet, soap, and roll the clothes before soaking them in a small quantity of water.

This done, the clothes are ready for what the experienced laundress terms the "first suds." Remove the clothes from the water in which they have been soaked and wash them by hand or with a machine in very hot water with plenty of soapsuds. Take care not to wash too many garments at one time, and change the water as frequently as necessary. Soap flakes or chips, soap jelly or soap solution (made by dissolving a cake of soap in 3 quarts of hot water) all have a decided edge on a bar of soap for making suds easily and efficiently. Hand rubbing on a washboard should not be too severe. Use plenty of water on the fabric to avoid injury.

Specific instructions should accompany a machine; too often the operator injures delicate fabrics and small articles through carelessness. Put these in net or thin muslin bags as a protection and to ease the job of handling them. The clothes should be wrung as dry as possible. Injury to both fabric and the rollers can be avoided by folding buttons and buckles inside the garment. Putting the clothes through a second suds will make them spotlessly clean.

Boil clothes only if they are to be disinfected or if they are extremely dirty. They should be wrung from the wash water and boiled for 5 to 10 minutes in fresh, hot, soapy water. White clothes boiled any longer than this will tend to turn yellow. Dirty or very yellow clothes can be whitened by mixing one to 6 tablespoons of kerosene or turpentine (inflammable) with a boilerful of water. A more expensive but easier method—one which will not injure the hands nor leave an odor—is to add the juice of one or two lemons to a boilerful of water.

And so to the clothesline. But before hanging the clothes to dry, rinse them thoroughly in plenty of hot, clear, soft water; cold water hardens the soap, makes it stick to the fabric. It is one of the most frequent causes of weakening and yellowing fabrics. And, of course, wring the clothes well from the rinse water before hanging them to dry.

No effective home method for "setting" colors stands up under rigid scientific tests. Best way of guaranteeing color fastness is to ask for a "label guarantee" with the garment when you purchase it. Never soak colored clothes unless you are absolutely sure that the colors are fast. Wash them as fast as possible. Use neutral, mild soap and washing powders, unless the clothes are extremely dirty. Soap bark extract is easier on the most delicate fabrics than ordinary soap. Where white starch shows on dark fabrics, tint it with tea or coffee for browns, bluing for blues, and special purchasable tints for other fabrics. Adding gelatin to starch for light-colored linen and cotton fabrics, and glue for dark materials has been found effective by some housewives. However, domestic experts warn that such methods can be disastrous unless they are used by experienced hands.

Woolens, silks, and rayons should be washed and rinsed in *lukewarm* water. They should not be rubbed but should be squeezed and worked in an abundance of lukewarm suds of about 100 degrees F. Use only neutral soaps, no strong washing powders, and never rub soap directly on the fabrics. Alkalis—in soap or used for softening water—are taboo. Strong solutions of the chemical will actually dissolve woolens. Hand washing is best, and the fabrics should be wrung carefully and not too vigorously to prevent stretching. Measure knitted garments before they are washed in order to be able to stretch them later in case they shrink. Knitted sweaters and such garments should never be hung while wet, but should be dried by placing them flat on several thicknesses of clean, soft material. Dry them in a warm place but never near a fire or in the direct sunlight. As much as possible avoid wrinkling silks. Rinsing them in a bath containing a half ounce of 36 percent acetic acid to a gallon of water will increase their luster. Ribbons, laces, and veilings come out of the wash best when dipped in skim milk or whey that is free of fat. Do not iron them, but stretch them over a smooth surface to dry. Use only a medium heat in ironing silks, and do not wet them too heavily or unevenly. Both with woolens and with silks use a pressing cloth, preferably a slightly dampened cheesecloth. Always iron on the *wrong* side.

Follow these same rules in washing curtains. Dry them on stretchers or on a sheet spread on the ground.

Wash pillows in a weak washing soda solution, using a good suds. Rinse in lukewarm water and beat the pillows a few times while they are drying. A better—but more complicated— method is to wash the feathers separately in a muslin bag two or three times the size of the ticking.

Bleach clothes by moistening them and spreading them on the grass in the sun. For stubborn stains, hydrogen peroxide is an effective bleach, added to water in the proportion of one pint to a gallon. Oxalic acid (a poison), used in quantities of one ounce per gallon of water, is effective when the garment is covered with ink or rust stains.

Most common of household bleaches is so-called "Javelle water"—made by dissolving one pound of washing soda in a quart of boiling water, cooling, and adding a half pound of bleaching powder (chloride of lime) dissolved in two quarts of water. After allowing the mixture to settle and straining out all solids, store it in tightly closed bottles. Use the solution in proportions of one half pint to a gallon or more of cold or lukewarm water. Never allow the clothing to remain immersed in the mixture for more than a half hour and never soak silk, wool, or fabrics with designs in this bleach. The results are often disastrous.

Water, in its flight through the air from rain clouds, or in its long journey down mountain streams or through subterranean passages, is joined by gases, mineral compounds, or just plain dirt, which have amazing effects on its chemical makeup. Of course, careful launderers make sure that the water they use is as "clean" as possible. Filtering out the objectionable materials with a filter of salt, charcoal, sand or such materials placed over the faucet spout is partially successful in getting rid of suspending iron compounds. Allowing the water to stand over night will also cause the iron to settle. Hardness in water presents major problems in some localities. If compounds of calcium, magnesium, or iron are present in the water in any great degree, the water is "hard"—how "hard" depends on how much mineral is present. When soap is added to such water a sticky unpleasant scum is formed which settles on the clothes, destroys the soapsuds, sometimes leaves stains. Some hardness of water—called "temporary"—

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Three basic rules for the efficient home launderer are: (1) Separate and wash separately clothes of different color, texture, and soil, (2) hand scrub sturdy fabrics in steaming water with lots of suds; squeeze gently, do not scrub delicate fabrics in lukewarm water and suds, (3) rinse in warm water to remove all traces of soap.

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is removed by boiling. This results in decomposition of the minerals and formation of a white scale often found on the inside of teakettles.

Several methods of combating hardness in water can be used. Distilling the water to remove the insoluble compounds is effective, but distilling apparatus is beyond the budgets of most households. Calcium and magnesium compounds can be removed by distilling or by removing the scum formed when soap is introduced into the water. But both these methods are expensive and complicated. Better than either is to add inexpensive washing soda to the water. This precipitates the minerals, makes it easy to drain off the clear water. A pound of soda dissolved in a quart of water will form a good solution. Mix it with the laundry water in a ratio of two tablespoons of the solution to every gallon of water. Dissolve all the soda thoroughly.

Other effective methods are to add soda, lye, trisodium phosphate, borax, or ammonia solution to "soften" the water. Greatest difficulty about any of these several methods is gauging accurately the amount of softening agent needed. To know this, you must know the degree of hardness of the water. A good test for water hardness is given in a publication of the Bureau of Home Economics,* from which most of the material in this article was taken.

By far the most satisfactory water-softening method is that in which water is passed through tanks of zeolite to remove impurities. Inexpensive and efficient when homemade, it is being used in an increasing number of modern households.

Choice of proper soap is as important to the success of the home laundry as choice of good material is to the artisan or craftsman. The story of soap is an involved one, to be told at another time in these pages. From it, the housewife will be able to learn how to purchase soaps devoid of excessive water, uncombined alkali, uncombined fat, excessive rosin, salt, and insoluble material. But in washing her family laundry she should remember that silks and woolens—most sensitive to alkalis—are the aristocracy of fabrics; they demand the best in soaps. Cotton materials that tend to fade—and similar delicate fabrics—will show permanent injury if anything but a mild soap is used on them. The ordinary run of cotton fabrics and heavy, dirty materials are practically immune to strong chemicals in cheaper soaps, will usually emerge from a washing with a strong soap none the worse for wear. Wise housewives will find their budgets and their wardrobes both on the healthy side if they follow this basic rule.

Bluing a fabric does not actually make it blue; it merely covers or neutralizes the yellowish tint of white fabrics by producing a gray which appears white to the human eye. It does not remove the cause of the yellow tint. Household bluing can be either insoluble or soluble. The former, sold in balls, cubes, or powders is fast to light. Aging has no effect on it, and it gives a pleasing tint to fabrics when the bluing particles are fine and light. Insoluble bluing does not dissolve in water, but colors the fabric with tiny suspended particles. Because of this, keep the solution well mixed to prevent streaking.

Soluble blues—either soluble Prussian blue or any one of a great number of blue dyes—also give good tints. Care should be used with Prussian

[Concluded on page 19]

Heat generated millions of miles away from the earth's surface warms water for this ingenious Florida householder. The sun's rays are all that are needed to make the solar water heater operate. But the problem of cloudy days is still an unconquered flaw in this effort of man to harness a force of nature.

**Farmers' Bulletin No. 1497: "Methods and Equipment for Home Laundering," available at 5 cents from the Superintendent of Documents, Washington, D. C.*

COOPERATION

A NEW ENGLAND Governor joins 3 other State executives—those of New York, Minnesota, Wisconsin—who have in recent months given public recognition to the role of cooperatives in improving the farm standard of living. Here are a few highlights from an article by Gov. Aiken of Vermont in the "Ohio Farm Bureau News":

"The key to agricultural prosperity lies in cooperation, and we have got to carry our cooperative efforts much further in the future than we have done in the past. . . . .

"Farmers themselves are making a better record in lending money to their neighbors through their cooperative organizations than has been made in most cases by professional money-lenders. . . . .

"I look for increased cooperative handling of dairy products. Efforts to this end have been going on for a generation. They have met with reverses from time to time. . . I believe the only safety for the dairymen of New England lies in looking forward to and planning for the time when they, by themselves or in cooperation with the consumers, will distribute a far greater percentage of their products in the city market than they are doing today."

COOPERATIVE housing, of considerable importance in such European nations as Sweden, Denmark, and Czechoslovakia, has not made much headway in the United States. Two of America's largest cooperative housing developments are the Amalgamated Housing Corporation and the Amalgamated Dwellings in New York City. Both were sponsored by the Amalgamated Clothing Workers of America but are tenanted largely by non-members of the union.

Around these cooperative apartment houses, the owner-residents have formed a number of cooperatives to supply themselves with groceries, milk, laundry service, and (by means of their own power plant) electricity. Last year's returns on these cooperative enterprises are just in. As a result of the savings effected through these co-ops, 862 families in the two groups of apartment houses were able to vote themselves patronage returns of $19,000 on their year's purchasing; and set aside another $19,000 for further expansion of cooperative purchasing activities.

Cooperative and community activities blend into one another. Cooperators maintain many of the community enterprises — libraries, playgrounds, a children's summer camp, drama groups, adult education classes, bus service.

EVERY business would like to know how much of a market it can count on. Here the cooperative enterprise, whose customers are for the most part also owners of the business, begins with a headstart. But members do not always purchase all their needs from the co-op. One method of getting further toward an assured market is the "oil campaign" of the Oil Division of the Indiana Farm Bureau Cooperative Association. Fifth such annual drive was held during the last four months of 1937.

These campaigns, says the manager of the Division, "are held each year in order to give Indiana farmers an opportunity to make known their lubricating oil requirements for the following year . . . thereby enabling the United Cooperatives, Inc., to blend Farm Bureau Oils and to purchase the required oil stocks for the customers. Each year there has been a decided increase in gallonage contracted and in number of contracts.

"During the 1937 campaign 26,975 farmer contracts were obtained, an increase of 4,449 contracts over the previous campaign; and 766,393 gallons of oil were contracted, an increase of 115,549 gallons over the previous campaign. Also, 390,670 pounds of grease and 18,094 gallons of fly spray were contracted."

SEVEN major cooperative wholesales report a total volume of business of 27½ million dollars in 1937 in petroleum products, general farm supplies, and groceries. This compares with sales of 22¼ million dollars in 1936; making an increase in dollar volume for the year just ended of 23.6 percent.

The 7 wholesales, all affiliated with the Cooperative League of the U. S. A., serve more than 1,000 retail cooperatives, in cities, towns, and—chiefly—in rural areas, from Massachusetts to Colorado. Comparative sales figures for each of the wholesale associations show gains for 1937 as compared with 1936:

	1936	*1937*
Central Co-op Wholesale, Superior, Wis.	$2,845,741	$3,356,550
Consumers Cooperative Ass'n, N. Kansas City, Mo.	3,397,808	3,894,843
Eastern Cooperative Wholesale, New York	285,512	533,140
Indiana Farm Bureau Co-op Ass'n, Indianapolis	5,187,457	6,644,623
Midland Co-op Wholesale, Minneapolis, Minn.	3,033,079	3,696,742
Ohio Farm Bureau Co-op Ass'n, Columbus, Ohio	7,014,697	8,475,861
Penn. Farm Bureau Co-op Ass'n, Harrisburg, Pa.	511,887	950,000
	$22,276,181	$27,551,759

"In the current recession, the associations reported that there have been no failures of local retail co-ops served by them," states the Cooperative League.

One of these wholesales, Midland Cooperative Wholesale, with headquarters at Minneapolis, is preparing to branch out from the oil business into groceries. Organization work is now going forward to set up the first co-op grocery under Midland's auspices, at Glenco, Minn.

One hundred and sixty-eight retail cooperatives are now affiliated with Midland. Twenty of these joined during 1937.

Passing its quarter million dollar goal, the People's Cooperative Society of Superior, Wis., reports a 1937 sales volume of $251,000—a 40 percent increase over 1936. With a membership of some 800, the Society has taken on a full-time educational director, and regards its citywide educational program as an integral part of its activities . . . During 1937, the Society opened its third branch store, a garage, and an electrical appliance department.

Cooperators with problems very similar to those of American farmers and consumers, met recently in the annual Canadian Cooperative Congress. Concerned with a broad program for the improvement of standards of living of all Canadians, the Congress approved a resolution which stressed, alongside of the organization of consumer cooperatives, the need of farmers and other primary producers to organize into marketing co-ops, and of urban workers into trade unions.

Declared the Congress:

"The economic and social welfare of Canada demands that there should be a more equitable distribution of the national income and to that end it is desirable that farmers, fishermen, and other primary producers should be organized in collective bargaining associations or agencies, or in cooperative marketing associations; and urban wage and salary workers should be organized in trade unions to insure that they have an effective voice in determining the compensation which shall be paid them for their services to society."

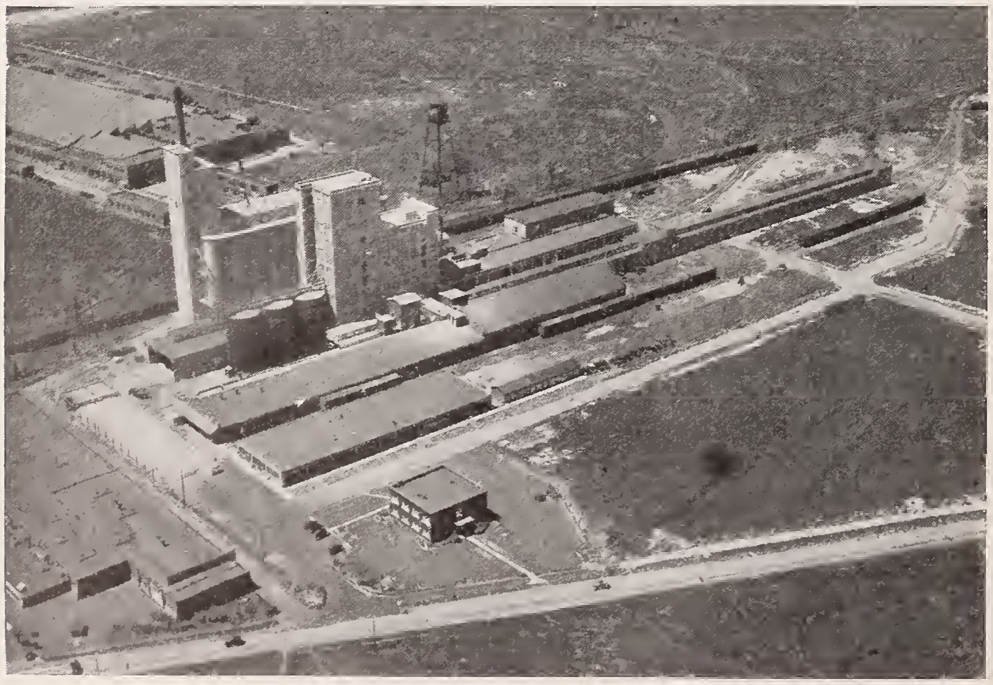
The Cooperative Union of Canada includes in its membership many types of co-ops—consumers' societies, the Saskatchewan and Manitoba wheat pools, two livestock producers' associations, "general purpose" farmers' societies, three fishermen's cooperatives, dairy societies both of producers and consumers, etc. Distributive turnover alone of Cooperative Union affiliates came to over $6,300,000 in 1936, on which the societies returned to members nearly $180,000 in patronage refunds.

Oklahoma farmers have since 1931 been in contact with the work of the Farmers' Union Cooperative Hospital at Elk City. In the recent annual meeting of the national organization, the Farmers' Educational and Cooperative Union endorsed the cooperative provision of medical care and hospitalization, and the work of the recently-founded Bureau of Cooperative Medicine. Said the convention's resolution:

"Whereas Cooperative hospitalization and practice of group medicine have been proven to be practical and to meet the needs of the great middle class of population, and particularly the problem of rural areas, the Farmers Union Hospital at Elk City, Oklahoma, under the efficient direction of Doctor Shadid, being a splendid example of cooperative possibilities . . .

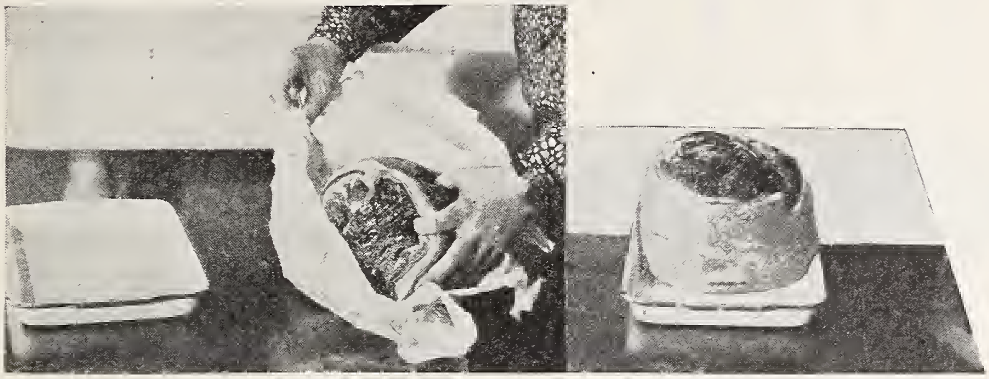
"Now therefore be it resolved that the Farmers Educational and Cooperative Union of America declares its support of the principles of group medicine and hospitalization on a Cooperative basis, with fixed prepayment provisions covering individuals and families."

Air-photoed here is the large feed mill located at Buffalo, New York, and operated by the Eastern States Farmers Exchange, an outstanding example of the centralized type of cooperative owned directly by thousands of farmers. This organization, with headquarters in Springfield, Massachusetts, purchases supplies of feed, fertilizer, and other farm supplies for more than 82,500 farmers in the 6 New England States, Pennsylvania, Maryland, and Delaware.



Where Do You Park Your Meat?

Experts give tips on the safest way to store fresh and left-over meat at home



Uncooked meat should be unwrapped as soon as it comes from the store and placed in an uncovered dish or covered only loosely. Cover cooked meat loosely with oiled paper to prevent too rapid drying out.

Meat purchased from the choicest cuts and sold over the most sanitary counter has little defense against the rigors of a bacteria attack when kept in the household under improper storage conditions.

Poor refrigeration accounts for most spoilage of meat. Not only is the spoilage expensive; it is a ready source of food poisoning and in some instances can result in acute injury to health. Policing meat supplies to see that they reach the consumer in a clean and uncontaminated state is a responsibility of State or local health authorities. Federal officials step into the picture when meat passes over State lines. They stamp the "little purple circle" (see Consumers' Guide, Oct. 18, 1937) on meat inspected in packing plants and found free of disease. Wise consumers look first for a stamp of sanitary approval.

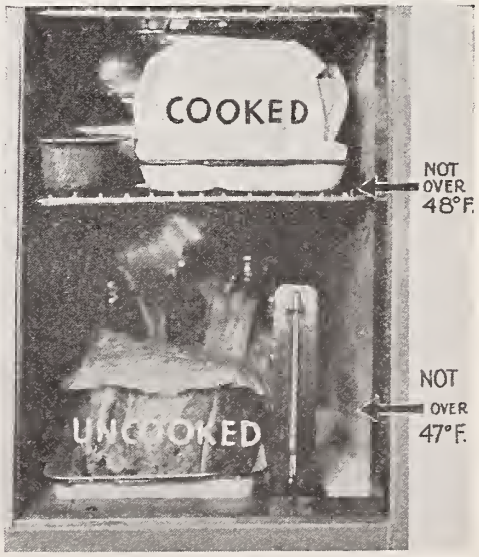
At the market the protecting hand of government is lifted. Guarding against health enemies in the home is the consumer's job. As soon as meat is removed from the store refrigerator, the destructive bacteria multiply rapidly and begin their ravages which may result in spoilage and creation of poisonous toxins in the meat. Bacteriologists in the Bureau of Home Economics investigated this common household problem and emerged with a few simple suggestions for preserving meat in the home.

They found that two conditions contribute to spoilage of meat: bad refrigeration, and too much covering of the meat. They made these recommendations for the housewife: if uncooked meat is kept in the home for more than a day, see that the refrigerator is below a temperature of 50 degrees—say about 47 degrees Fahrenheit. This maximum temperature is the same that applies to milk.

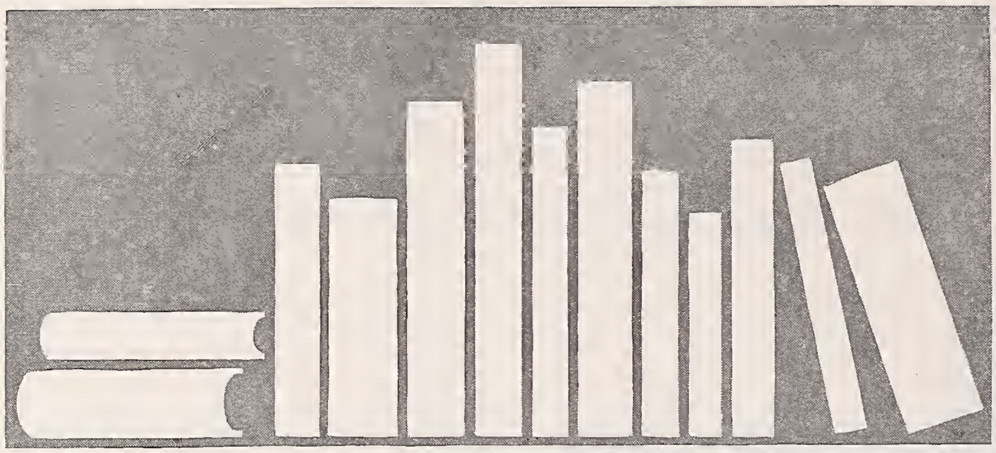
Remove the wrapper promptly from uncooked meat and place the meat on a clean platter or in a pan. If covered at all, lay a piece of clean waxed or oiled paper over it loosely. Experts have found that when the meat dries a little on the surface, growth of bacteria is checked.

Slightly different rules hold for cooked meat—in which the number of bacteria is markedly reduced. It should be loosely covered with oiled paper to prevent its drying out. Cooked meat is best preserved when placed in the cold part of the refrigerator, and should not be kept unused for too long a period of time.

Ground cooked meat should be used immediately after it is ground, since it is an easy victim of contamination. Particularly important is this rule for ground meats used in salads and sandwiches which are not reheated after they are ground. This warning should be observed just as carefully for reheated ground meats—such as those used for croquettes—which are rarely reheated long enough to destroy bacteria. The danger of such contamination becomes more acute if the meat is ground or chopped while warm and then allowed to stand without proper refrigeration.



Store uncooked meat in the colder portion of the ice box; cooked meat, in the slightly less cold portion.



Consumers' BOOKSHELF

The Consumer Speaks, Consumer Ideas No. 2, issued by the Consumers' Counsel of the National Bituminous Coal Commission. 1938, pp. 61. Address: Superintendent of Documents, Washington, D. C. 10 cents. In excerpts from statements made at a consumer conference held in Washington, D. C., December 9–10, 1937, this booklet presents a cross section of consumer opinion on the minimum prices set in December for bituminous coal by the National Bituminous Coal Commission; suggests problems posed by the new prices; and discusses the relation of the Consumers' Counsel to the Commission.

What Is the Discussion Leader's Job, by the U. S. Department of Agriculture. 1937, pp. 21, illus. Address: Extension Service, U. S. Department of Agriculture, Washington, D. C. Free. Although this pamphlet was written primarily for farm people, the same principles would apply to any discussion group. The material is arranged under the following headings: Planning, preparation, procedures, and estimation of the results. This bulletin lists two series of free subject-matter pamphlets for discussion groups which treat different types of problems affecting farm groups.

Milk Control, Governmental Regulation of the Dairy Industry in the United States, prepared by the American Municipal Association. Publication No. 57, 1937, pp. 49. Address: Public Administration Service, 850 East 58th Street, Chicago, Ill. 75 cents. Outlines the principal steps that have been taken to safeguard the quality and safety of the milk supply by local, State, and Federal authorities. The appendices of this publication contain: U. S. Public Health Service Standard Milk Ordinance, Milk Control Law of the State of California, a summary of the Milwaukee Milk Marketing Survey prepared by the Agricultural Adjustment Administration, an analysis of the Milwaukee Milk Survey by a former Assistant City Attorney of Milwaukee and recent court decisions on milk control.

Buying of Drugs, by Winona M. McGuire, Fresno Technical High School, and A. Prudence McGuire, San Bernardino High School. 1937, pp. 52, mimeo. Address: California State Department of Education, Sacramento. Calif. 15¢. (Residents of Calif. add 1¢ sales tax.) Subjects treated: buying of "patent" medicines, dentifrices, cold cures, antiseptics, pain killers, cathartics and laxatives, and materials for the family medicine chest. Contains a glossary. Each unit is made up of written discussion of significant points for the student, a list of questions to be considered, suggested student activities, a true-false test, and a bibliography.

How to Buy, Series 3, by students of home economics class, University of Iowa. 1937, pp. 58, mimeo. Address: Department of Home Economics, State University of Iowa, Iowa City, Iowa. 25¢. Presents in brief outline form quality guides for buying carpets and rugs, gas ranges, men's dress shirts, men's leather gloves, perfumes, reading and study lamps, typewriter paper, wooden tables, wrist watches, and writing paper. Bibliographies.

Consumer's Course, by Jerry J. Fogarty and Ralph Pugh under the supervision of R. D. Russell. Undated, 79 pages of text and 21 pages of tests, mimeo. Address: State Department of Education, State of Idaho, Boise, Idaho. 50¢. A correspondence course in consumer problems for adults prepared by the State Department of Education in cooperation with the Civilian Conservation Corps, and Works Progress Administration in Idaho. Each lesson contains 5 to 10 pages of discussion along with references and a question sheet for self-testing by the student. Lesson titles are: advertising from the consumer standpoint; instalment buying and the consumer; automobile consumption; consumption of gasoline, oil, and tires; consumer budgeting; the consumer and his money; public health; some common ailments; cosmetics; proprietary remedies; housing conditions in the United States; and the consumer and the law. In conclusion a three-page final examination. Only residents of Idaho may take this course by mail, but nonresidents may purchase the material for private study.

Home Project: Buying Problems of the Home. 1937, pp. 75, mimeo. Address: Extension Service, Iowa State College, Ames, Iowa. 20¢. Four lesson plans for use with adult groups are presented dealing with the following topics: (1) Effect of advertising and selling practices upon buying for the home. Buying pointers for coal, kerosene, and gasoline stoves. (2) Home Painting—what painting to do; selecting and applying the paint. (3) Selection of children's furniture for developing needs and continued use. (4) Aid to the consumer in buying sea food. Summary of course.

Consumer Buyer Units in Clothing and Textiles for Use in High School Home Economics Classes, by Alma Dale Newell and Lucille Osborn Rust. Division of Home Economics Bulletin No. 9. 1936, pp. 62. Address: Division of Home Economics, Kansas State College, Manhattan, Kans. Free to teachers and to libraries. Units deal with the purchasing of sewing equipment, clothing materials, hosiery and underwear, ready-made garments, shoes and accessories, bedding and linens, rugs, curtains and upholstery. Each unit opens with a statement of understandings or ideas to be developed; and suggests teaching points, class activities, and reference material.

PLAYLETS

The leader of a consumer group writes for suggestions of playlets or skits dealing with consumer problems which might be used to make their meetings livelier. Not many such playlets have come to our attention, but here are a few which might be tried out. May we also suggest that consumer groups try writing their own playlets. Send in your original compositions for our consumer education files.

A Bargain in Sheets, by Mary Elizabeth Rust. Journal of Home Economics, Vol. 27, No. 1, Jan. 1925, pp. 26–28. Mimeographed copies may be secured from the American Home Economics Association, Mills Building, Washington, D. C. 10 cents. This playlet brings out the pointers one should consider in buying sheets. The scene of action is at the counter of a store having a special sale of sheets. Cast of characters — a saleswoman and two customers.

Neighbors at the Grocery Store, prepared for North Dakota Homemakers Clubs by Ella M. Johnson, Foods and Nutrition Specialist. 1935, pp. 7, mimeo. Address: Extension Service, North Dakota Agricultural College, Fargo, N. Dak. 10 cents. Treats factors to be considered in the purchase of groceries. Scene—the interior of a grocery store. Cast of characters—a storekeeper, two women customers, and an errand boy.

Bridal Blankets, by Frances E. Knott. Practical Home Economics, Vol. 14, No. 1, Jan. 1936, p. 11. Address: Lakeside Publishing Co., 468 Fourth Ave., New York, N. Y. Single copies of this magazine, 30 cents. A very short playlet for 3 characters, a saleswoman, and 2 women who are shopping for gift blankets for a bride.

Bread and butter problems of living become literally the subject matter of education as schools increasingly use the consumer approach to the study of economics.

Your Food Supplies & Costs

Retail food costs returned to early 1935 levels as the downswing in food prices which commenced last September continued unchecked during the month ending February 15. Egg prices led a downward parade of all food groups except fresh fruits and vegetables, and cereals and bakery products. The average of these two latter groups has remained practically unchanged since mid-December, whereas costs of other food groups have tumbled. Prices of meats and dairy products registered the next largest drops, but the decrease in meat prices was smaller than in recent months. Since mid-September food costs in general have tumbled 9 percent with one-fourth of the decrease coming from January 18 to February 15. A 19 percent reduction in meat prices has been the major factor behind the downswing.

Bread, cabbage, onions, roasting chickens and milk were the only major food items which on February 15 were above their mid-February price of last year. Prices of most items were sharply under those of a year ago, with butter, eggs, beef, fresh pork, lamb, and lard at their lowest February level since 1934. On February 15 the index of retail food prices as reported by the Bureau of Labor Statistics was 78.4 percent of the 1923–25 average.

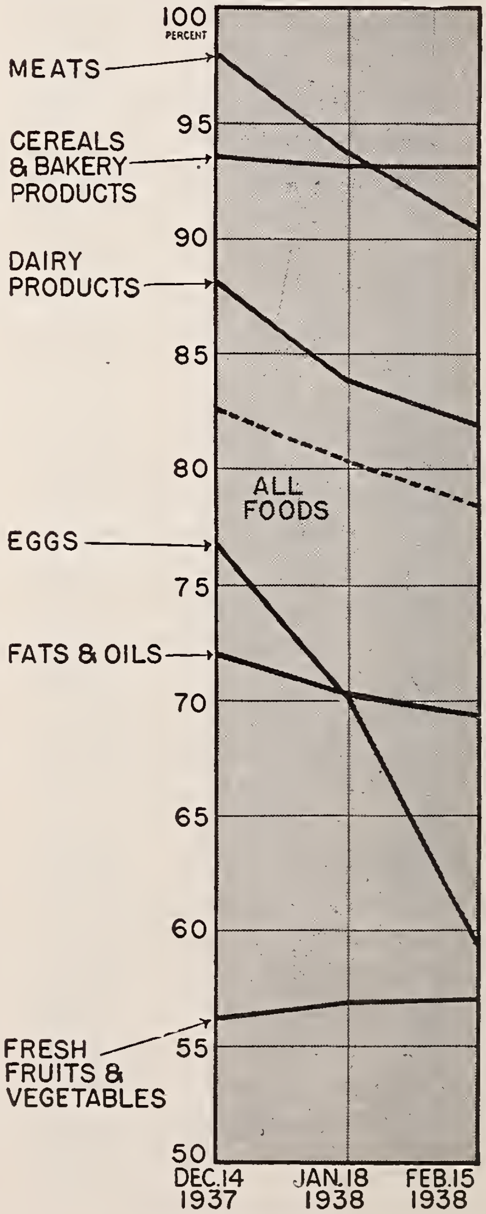
Most of the downward adjustment in meat and egg prices expected during the first half of 1938 appears to have occurred by mid-March. Beef prices probably will ease off some more, but the drop most likely will be small when compared to the sharp changes since October. Fresh pork prices are expected to advance slightly through April when a minor recession is in prospect. A price upswing also is in prospect for lamb. Egg prices appear to be at or close to their seasonal low point but butter prices most likely will continue to decline seasonally through June. The outlook is for smaller than usual increases in apple and orange prices during the first half of the year. Prices of most fresh vegetables are expected to move down until they hit their low point in the summer. Cabbage, onions, celery, potatoes and sweet potatoes are exceptions to this downward trend during the first half of the year. A smaller than usual price advance is expected in potatoes and celery, but a larger than seasonal jump may occur in onions and cabbage.

First spring lambs from the 1938 crop are expected to reach markets in April. These early lambs are fattened mainly on mother's milk and are slaughtered when from 3 to 5 months of age. The crop is indicated to be about one-sixth larger than last year's small crop, and marketings prior to July 1 probably will be larger than those of a year ago and better in quality. Retail lamb prices generally are highest from May to July, when supplies are seasonally small, and consist mostly of spring lambs. Prices this year are expected to be sharply below those of 1937.

Hog slaughter during the remainder of the marketing year which ends September 30 probably will be larger than a year ago with most of the increase above 1937 occurring after April. Seasonal decreases in slaughter are in prospect until fall pigs are marketed in volume in late April or early May. Prices probably will continue moving up until late April and then will ease off until late in the summer when another seasonal decrease in slaughter is in prospect. Prices most likely will remain under their 1937 level.

Strawberry shipments are expected

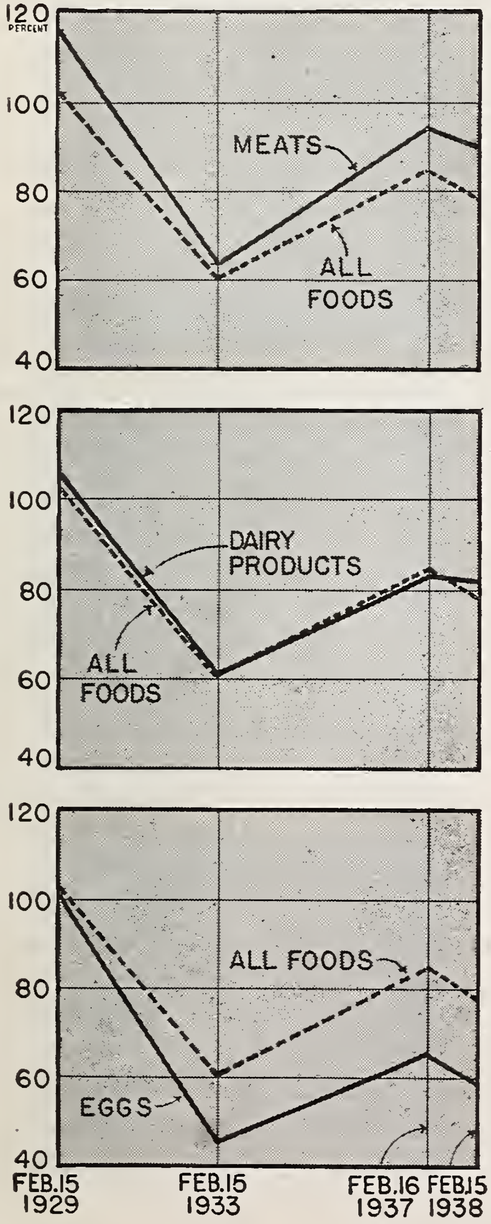
A CLOSE-UP OF FOOD COST CHANGES
1923-1925=100



to increase sharply until peak movement occurs in early May. Berries are now moving from Louisiana, the largest strawberry-producing State. Growers in this area plan to ship only strawberries grading U. S. Number 1. States shipping primarily in March and April produce about one-fifth of annual commercial production. The crop in these States is indicated to be about one-sixth larger than last year. If weather conditions continue favorable, production in the remaining States also probably will be above 1937.

Orange supplies during the remainder of the marketing year which ends in October are expected to be materially larger than they were a year ago with the sharpest increase over 1937 in the summer and early fall, when California Valencias are practically the sole source of supply. The California Valencia crop is indicated to be more than 50 percent larger than last year's freeze damaged crop. Supplies at present consist of Florida oranges and California Navels. While prices probably will move up during the remainder of the season, the advance most likely will be less than usual.

A PERSPECTIVE OF FOOD COST CHANGES
1923-1925=100



Asparagus marketings usually are heaviest in April, but peak movement may come a little later this year because of wet weather in California. Acreage in California, which produces about one-fifth of the annual fresh supplies and practically all of the early crop, is slightly above that of a year ago. Asparagus season generally ends in July.

Retail prices of butter and eggs decreased from January 18 to February 15 as supplies increased seasonally. Egg prices dropped 5.5 cents a pound, or double the decline in butter. On February 15 retail egg and butter prices were about 3 cents less than they were a year ago. Butter purchases by the Federal Surplus Commodities Corporation temporarily checked sharp price declines in February, but further seasonal declines are in prospect until the low point is reached in June.

Increasing supplies of tomatoes and a downward price trend are in prospect until the seasonal low point is reached in the summer. Bulk of March and April tomatoes come from Florida. The spring crop in south Florida, which produces about half the Florida crop, is slightly larger than that of a year ago. Acreage planted in States shipping primarily in May is indicated to be over 50 percent larger than that of last year. Winter and early spring tomatoes usually are picked when green but mature, and are ripened at consuming centers. They are less juicy than the vine-ripened tomatoes marketed in the late spring and summer.

Apple marketings during the first half of the year come from storage holdings. On March 1, cold storage stocks were 60 percent above those of a year ago, and materially above average. In view of record supplies, prices probably will continue under 1937 and not advance as much as usual. Retail apple prices of 4.4 cents per pound on Feb. 15 were one-third less than they were a year ago.

Cabbage and onions were the only items in the fresh fruit and vegetable group which were retailing above their level of last February. Prices of these two staples were about 40 percent above those of a year ago. However, potatoes were selling at almost half of their price of a year ago, while lettuce and celery prices respectively were down about one-fourth and one-eighth.

How Latest Food Costs Compare

	With costs 1 year ago*	With costs 2 years ago
All foods	7% down	3% down
Cereals, bakery products	1% up	1% up
Dairy products	1% down	2% up
Eggs	9% down	16% down
Fats and oils	13% down	9% down
Fruits and vegetables, fresh	27% down	6% down
Fruits and vegetables, canned	3% down	1% up
Meats	4% down	5% down

**Remember: 1 year ago many prices reflected drought conditions.*

WRITING RULES FOR TRADE

[Concluded from page 6]

45 parts fruit to 55 parts sugar must be described as "imitation" on labels and in advertisements. When these rules were proposed by the preserve manufacturing industry, the Consumers' Counsel of the Agricultural Adjustment Administration presented a brief in favor of several modifications of the suggested standards. (See the July 13, 1936, issue of the CONSUMERS' GUIDE.)

Rules of the knit underwear industry, adopted 8 years ago, require labels to show the amount of wool in knit underwear. Proposed rules for this industry would now require labeling of certain other fibers, shrinkage properties, and prevent the misbranding and misrepresentation of so-called combed yarn garments.

Proposed rules for the cotton yard goods industry include in Group I a provision embodying the American Standards Association standard relating to shrinkage.

Sometimes Group II rules will state affirmatively practices which an industry looks upon favorably, rather than define malpractices on which it frowns. House dress and wash frock manufacturers, for example, recommend in their Group II rules, that "truthful and accurate descriptions of the washability, color fastness, and shrinkage properties of fabrics used, be attached to the dress or frock or be printed on the labels used by members of the industry on such dresses or frocks."

Group II rules sometimes make up in goodness of intention what they lack in provisions for enforcement. Two Group II rules recently adopted by the school supplies and equipment distributors state:

"All members of this industry shall protect the consumer not only as far as is required by law, but as required by good morals and the best ethics of business."

"The industry approves the practice of handling business disputes between members of the industry and their customers in a fair and reasonable manner, coupled with a spirit of moderation and good will, and every effort should be made by the disputants themselves to compose their differences. If unable to do so, they should, if possible, submit these disputes to arbitration."

Companies in the business of conducting home study declare that "it is the judgment of the industry that the sales representatives of all schools be selected primarily on a basis of ability and integrity."

Not to be confused with the trade practice rules of the Federal Trade Commission, are the "Commercial Standards" promulgated by the National Bureau of Standards of the U. S. Department of Commerce. An industry, or part of an industry, that wishes to standardize the meaning of words used in labelling, or the way a product is made, or its size, or its container, may ask this Bureau to help it work out a set of standards. These standards are a kind of dictionary of terms and their meaning. Nobody has to observe them. Unlike a Group I trade practice rule, a commercial standard has no force of law. Like a Group II rule, it is merely recommended as good practice. When business houses follow a commercial standard, they do so because they think it is good business for them to label something "in accordance with Commercial Standard—". Of course, this does not mean any government sanction for the product.

If the FTC, at the request of an industry, embodies a commercial standard in a Group I trade practice rule, the standard in effect becomes law (unless overthrown by court decision). If the FTC passes it as a Group II rule, it has no force of law, but the industry can attempt to persuade its members to abide by it.

A commercial standards project, like an application for a trade practice conference, is initiated by the industry involved. The industry's proposed draft of standards is considered at a conference where producers, distributors and consumers may all be represented, along with technicians of the Bureau of Standards. The draft, as revised and adopted by the conference, goes to the business units of the industry for approval.

If approval comes from producers of at least 65 percent of the industry's volume, and there is no active opposition, the standards are promulgated by the Department of Commerce. If members of the industry wish to use them, in production or labeling, they may.

Trade practice rules now in force or pending embrace over 200 industries. These range from the anti-hog-cholera serum and virus and baby chick industries, through knit underwear, metal burial vaults, rubber tires, and sleds, to the waxed paper, wholesale tobacco, woodworking machinery, and woven furniture industries. Industries for which trade practice conferences have been called as this is written include fur, hosiery, wool, silk.

In its role of judge of the merits of a proposed set of rules or of violation of adopted rules, the Commission forms its decision on the basis of evidence submitted and of its own judgment as to whether competition and the public interest are involved. Representatives of industry always appear before the Commission to give testimony. Only recently have organized consumers shown much interest in these proceedings, and yet frequently the questions involved are as vital to consumer interests as to those of an industry. Both for industry and consumers the value of the trade practice conference procedure might be enhanced by still greater participation by consumer spokesmen.

THROUGH THE WASH

[Concluded from page 10]

blue, since it is an iron compound which may result in yellow stains if the garment has not been well rinsed of alkaline soap and washing powder. The aniline blue dyes on the market, also used for bluing, have greater relative coloring power than the others. If used, be careful that they are not too fast to washing; an undesirable gray tint may otherwise result.

Best results will be secured from bluing if you observe these rules: Soluble powder bluing should be dissolved in a small quantity of water and then added drop by drop to the tub of clear water. Put ball or block (insoluble) bluing into a canton flannel bag (or similar material) and move it through the tub of cold water until the desired shade is procured. An insoluble *powder* bluing should be made into a paste before being added to water. Use the bluing water promptly after it is made; do not allow it to stand for any length of time. Test it by dipping a small garment in it or holding a small amount of the liquid in the palm of the hand. Remember that heavy fabrics require more bluing than others and that only a few garments should be treated at one time. Never allow clothing to remain in the tub while the bluing water is being drawn off, and remember to stir the water often. Over-blued clothes may be whitened by pouring boiling water over them or by boiling them for a few minutes.

Starching should not merely stiffen the fabric; it should leave it smooth, pliable, and with a certain "body" to make it attractive. A good starch penetrates well, leaves a glossy finish, and makes the fabric pliable. A stiff starch paste does not necessarily mean a stiff finish. Pastes vary with the type of starch used, the hardness of the water, and the length of time they are boiled. Cornstarch forms a thinner paste than potato starch, but leaves a stiffer finish. Wheat starch, which forms an extremely thin paste, gives an even stiffer finish than cornstarch. Potato starch results in a very soft, smooth finish, while rice starch is more penetrating than any of the others. Use potato, sago, and cassava starches for dyed fabrics, since they are most transparent.

Cornstarch is the favorite among housewives because it is most versatile in finishing a garment, and is inexpensive. Natural starches are insoluble unless heated with water until the grains swell, or burst and dissolve. So-called soluble starches are merely ordinary starches treated with acid or alkali which makes them partially soluble and thin boiling. Most starches sold over the counter are of this type; added to them are various substances which result in added gloss, pliability, softness, or whiteness of the starched fabric. Bureau of Home Economics experts recommend this formula for a good starch paste which can be used on practically all fabrics: 2 to 6 tablespoons of cornstarch, one-third cup of cold water; one-half teaspoon of lard, paraffin, or any white wax; and a quart of boiling water. Mix the starch and part of the cold water and stir the solution into the boiling water in a double boiler. Use the remaining water to rinse out the adhering starch. Add lard or white wax and cook for 15 to 20 minutes. Strain off all lumps. Always starch garments wrong side out, using thick paste for heavy material, thin for light fabrics. Keep the starch hot and remember the hotter the paste, the more successful the results. For stiffer finishes, wring the garment as dry as possible.

And finally, the ironing board. Iron with a clean hot iron, as heavy as can be handled without too much effort. Keep it hot and rub occasionally with wax or parrafin to prevent spotting. Press with the thread of the fabric until it is dry. Gloss on hems, tucks, and seams can be removed by moistening lightly. Iron clothes on the right side, unless you desire to bring out the pattern of the fabric. Fold the articles as little as possible and preferably lengthwise in the direction of the warp.

Cover photograph: The Evening Star, Washington, D. C.

STUDY QUESTIONS FOR THIS ISSUE

1. Does your city government provide any services similar to those of New York City's Department of Markets, described on page 2? If so, write the CONSUMERS' GUIDE.
2. Under what law does the Federal Trade Commission engage in trade practice conferences?
3. What is the basic purpose of a trade practice rule?
4. What is the difference between "Group I" and "Group II" rules?
5. What is a "cease and desist order" and how is it enforced?
6. What is the difference between a "trade practice rule" and a "commercial standard?"
7. What are three ways to whiten dingy or very yellow clothes?
8. What is an effective chemical to use in removing ink stains?
9. What is "Javelle water," how is it made, and what is it used for?
10. Describe one way of softening water.
11. At what temperature in the ice box should uncooked meat be stored?
12. Why is wrapping of uncooked meat which is stored in the ice box not recommended?

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VOLUME IV, NUMBER 26 MARCH 28, 1938

RAYON COMES OF AGE

CONSUMERS' Guide

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MEAT prices, that provoked headlines, protests, and strikes six months ago, have been quietly shrinking ever since and today are back to their late 1934 and early 1935 levels. Not headlined now is the fact that meat costs one-fifth less than it did at its peak in the fall of 1937, 4 percent less than in February 1937, and 5 percent less than in February 1936. In 6 months' time, the price of a pound of sirloin steak has dropped off 15 cents; round steak, 14 cents; rib roast, almost 10 cents. Pork chops have dropped one-third in price, and sell for 15 cents a pound less than at their peak last fall; pork loin roast is 14 cents cheaper; smoked pork products, from 5 to 8 cents a pound less. Lamb rib chops sell for 9 cents a pound under last fall's price; leg of lamb, 6 cents less.

Two forces have been tugging downward on these prices: Supplies, seriously curtailed by the 1936 drought, are filling up again; consumer incomes have been shrinking. Keep posted on food price changes and what's behind them through "Your Food Supplies and Costs," published in every other issue of the CONSUMERS' GUIDE.

A CHICAGO consumer wants to know whether anywhere else in the country there is a daily broadcast on best food buys similar to the one by New York City's Department of Markets. Our answer, useful perhaps to other consumers, is that the program nearest like New York City's is given on weekdays from Monday through Friday at 9:30 A. M., Eastern Standard Time, by New England's Consumers' Institute, with the help of Massachusetts's Department of Markets, over station WCOP in Boston. Lucky the consumer within earshot of these 2 reporting services; they ease the chore of daily marketing on small budgets.

Many other kinds of consumer broadcasts are on the air these days. Next summer the General Federation of Women's Clubs will celebrate the fifth anniversary of their weekly consumer program, conducted in cooperation with the Consumers' Counsel Division of AAA. Tips to consumers are given every Tuesday at 2:30 P. M., E. S. T., over the NBC red network, on this program.

"Your Health" is discussed every Wednesday at 2 P. M., E. S. T., over the same system, by the American Medical Association. The National Congress of Parents and Teachers broadcasts over NBC's blue network on Wednesdays at 4:30 P. M., E. S. T.

Textiles and household goods come in for their share of attention over station WCOP in Boston on Tuesdays at 10:45 A. M., and Thursdays at 10:30 A. M., both E. S. T. The Chairman of New England's Consumers' Institute puts on a program over station WAAB (Boston) at 1:30 P. M., on Fridays.

In New York City, Columbia University gives a health talk on Tuesdays at 10:45 A. M., E. S. T., over station WNYC.

Consumer programs are provided by the University of Wisconsin over station WHA on Saturdays at 11:30 A. M., C. S. T.

"Housekeeper Chats," prepared by the U. S. Department of Agriculture, are broadcast by some 300 local stations dotted over the country. Typical subject matter for one week covers such topics as these: Notes for food shoppers; planning the year's food supply; how to buy eggs; news notes from State Departments of Health; questions and answers about Food and Drug Administration activities. Consult your local stations to find out if and when this program is featured in your town.

"Is celery sprayed with a dangerous chemical in order to bleach the leaves and kill slugs?" asks a Pennsylvania consumer. "Are you taking chances if you eat celery leaves? Is the same method used with lettuce?" . . . Readers who saw our March 25, 1935 issue know how farmers bleach celery. The old-fashioned way was to bank the earth around the stalks. This practice is still followed by some farmers; others place boards or paper on either side of the row of celery. Like most vegetables, celery is subject to attack by insects and is fairly generally sprayed with insecticides and/or fungicides. While the Department of Agriculture urges farmers to use organic insecticides which are not toxic to humans, the more common practice is to spray with a lead arsenate. When a kind of gray film covers the leaves, it is a pretty good sign that a large residue has remained on the celery. Consumers are strongly urged to avoid eating the exposed parts of such celery. Sometimes it is difficult to tell with the naked eye whether a spray has been used and left too strong a trace. Since the lead arsenate does not penetrate the plant, doubtful consumers can be on the safe side by eating only the inside stalks and leaves which could not have been exposed to a spray. . . . Somewhat the same situation holds in the case of lettuce. To be on the safe side, particularly when you are not familiar with the way the lettuce has been treated on the farm, it is a good rule to discard ouside lettuce leaves.

RAYON COMES OF AGE

New rules for labeling put this man-made fabric into the news

Flip the sheets of any newspaper these days and you are bound to see the name of that up-start fiber—RAYON—heading advertisements for dresses, lingerie and draperies. For rayon is through with playing hide and seek. It has come of age. Like the venerable fibers—wool, cotton, silk and flax—which founded the house of textiles centuries ago, it has accepted its name and the responsibilities that go with a name.

Of course, rayon will continue to weave its way into practically every kind of material from the heaviest of twills to the thinnest of voiles. But its presence will be announced via a label. According to the new trade practice rules established for the rayon industry, rayon-made crepe, velvet, chiffon, and such will be marked "rayon crepe," "rayon velvet," etc. If a fabric is composed of a mixture of rayon and other fibers, or if rayon staple fibers have been blended with other fibers, the fact that rayon is present will be mentioned. Often, too, you will find printed on the label, instructions on how to care for this particular rayon material. How this change of front came about is important consumer history.

The story of rayon's career is a fascinating one. Some people say it entered the house of textiles through the back door. At least, most agree it came in on the shoulders of silk. When synthetic fiber made its first appearance, it was dubbed "artificial silk," though it had neither the elasticity, nor the tensile strength, nor the softness of silk. It was harsh and glittering, but it looked something like silk. When produced on a vast scale it could be manufactured into yarns and materials at less cost than silk. In bargain basements, shiny bedspreads, drapes, dresses, underwear made of synthetic yarns were sold as "artificial silk," "art silk" or "fiber silk." Consumers buying these bargains in elegance often had weird experiences. After the first laundering, a handsome pair of pajamas might be almost a third longer than it was originally—or a part of one

Cellulose is the basic ingredient of rayon. These blotter paper-like sheets are made of cotton linters and wood pulp, chemically treated and pressed. They are ready for a series of chemical baths which will transform them into a viscose solution, later to be hardened into thread.

sleeve might mysteriously melt away when it came in contact with a hot iron. Seams on the dresses made of these new materials often did not hold. Stitches in knitted goods raveled away to nothing. Consumers were baffled by these new "silk" materials.

Silk manufacturers were alarmed. They considered these artificial silks a poor imitation of their "natural" product. This invasion of the textile field would give silk a bad reputation. The makers of synthetic yarns said, "Wait." They were confident that given time their product would prove to be more than a poor imitation of silk. Scientists in their laboratories were learning to improve the quality of this man-made fiber. They were learning to make it more flexible, to make it stronger when wet, to make it more resistant to heat, to make it less harsh and shiny.

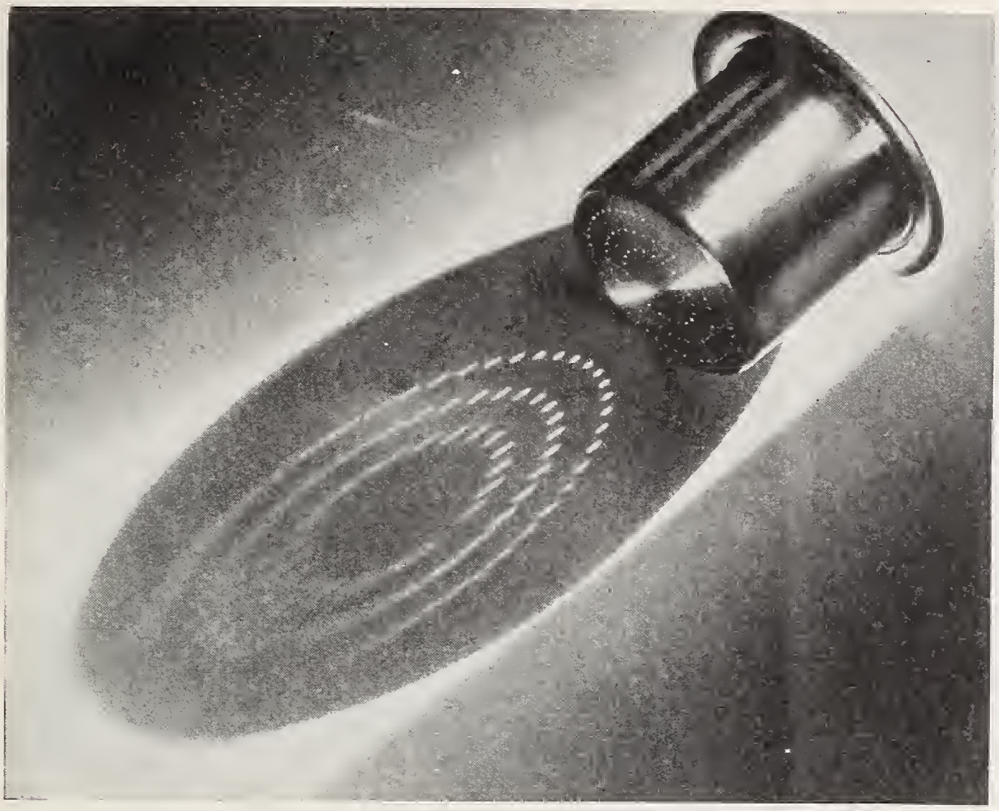
Not merely a substitute for silk, this improved product was hailed as a new basic material for textiles. Both the rayon and the silk industry agreed that it should have a name of its own. In 1924 the National Retail Dry Goods Association taking an interest in this argument, headed up a nominating committee to find a name for this troublemaker in the yarn family. From numerous candidates, Rayon, Klis, Filatex, Chardonnet, and Glistra, Rayon was selected as the candidate most likely to succeed as the generic name for all synthetic yarns. The name was acceptable to the manufacturers of man-made fibers at that time. Later there was some objection to the term, rayon, as the designation for acetate yarn. It was pointed out that rayon was too broad a term to cover all synthetic yarns.

Rayon yarns are made by four different processes — nitrocellulose, viscose, cuprammonium, and acetate. In all four methods, cellulose is the basic material used in manufacturing. Chemicals are used to dissolve cellulose into a solution suitable for spinning. Synthetic yarns made by the first three methods are regenerated cellulose. Yarns made by the acetate process are a chemical compound of cellulose and acetic acid known as cellulose acetate. Some of the makers of acetate yarns felt that since their finished product was a different substance than those made by the other methods, it should not be called by the same name. They preferred to call it acetate yarn or synthetic yarn.

It was not until 1937 that the argument of whether acetate yarns belonged in the rayon group or not was settled. In October of the past year, the Federal Trade Commission established the Trade Practice Rules for the Rayon Industry. Rule number 1 defines rayon.

"The word rayon is the generic term for manufactured textile fiber or yarn produced chemically from

This glutinous solution is liquid rayon. When filtered, aged, and forced through a spinneret, it will be given more chemical baths to coagulate it into thread.



Holes in a spinneret determine the thickness of rayon filaments which will be twisted into thread. Spinnerets are usually made of durable precious metals with holes accurate to the ten-thousandths of an inch.

cellulose or with a cellulose base and for thread, strands or fabric made therefrom, regardless of whether such fiber or yarn be made under the viscose, acetate, cuprammonium, nitrocellulose or other process."

Furthermore the rules go on to state that "it is an unfair trade practice to cause such fiber or yarn or thread, strands or fabric made therefrom to be sold, offered for sale, distributed, advertised, described, branded, labeled or otherwise represented (1) as not being rayon; or (2) as being something other than rayon; or (3) without disclosure of the fact that such material or product is rayon, made clearly and unequivocally in the invoices and labeling and in all advertising matter, sales promotional descriptions or representations thereof, however disseminated or published."

Though back in 1924 most of the manufacturers of synthetic fibers accepted rayon as the generic name for their product, that name was too often lost in the looms of the weaving industry, in ready-to-wear factories, and in the ads of the department stores. Too often the new silk crepe or velvet dresses carried no fiber identification mark to tell the consumer that they were made of rayon or part rayon and that they required a different kind of treatment than materials made of other yarns. With lack of frank labeling, the suspicion began to grow in consumer's minds that rayon, although it "made up" beautifully, was inferior in wearing quality to time-tested wool, cotton, and silk.

Rayon has made tremendous progress in its comet-like career. The first rayon yarns were harsh, brittle, and coarse. Now the techniques used in making synthetic fibers have been so improved that the yarns can be made in various sizes, and twists, and filament counts. They can be shiny, semi-bright or dull. They can be spun like reeled silk of long continuous filements, or they can be cut into short lengths and spun like cotton and wool.

Rayon combines well with other fibers. Many of our "new" materials today are made of yarns which have been spun with cotton, wool, or silk, combined with rayon. Others are made of pure rayon. Rayon has made it possible for more people to afford a variety of fabrics. Before rayon, velvet was identified with the robes of kings. Today, an evening gown of transparent velvet made of rayon and silk, or rayon and cotton, is possible for the girl living on a modest budget.

Because of rayon, far more color combinations can be obtained in textiles. Acetate rayon takes entirely different dyes than other types of rayon, silk, wool or cotton. A material woven of acetate and other fibers can be cross-dyed, thus achieving many interesting effects.

This chameleon fiber has stimulated the creation of many new weaves. Twisted rayon thread is responsible for the many rough and pebbled crepes and matelasses which have appeared in recent seasons. Rayon is at home in any type of construction—woven, knitted, braided, or lace. It goes into materials for curtains, draperies, unholstery and rugs and, in greatest volume, in wearing apparel.

The versatility of rayon is one of its chief virtues, yet at times it has given it a rather questionable reputation. Every fiber has definite characteristics which carry over into the fabrics in which it is used. As pure silk is the strongest of the fibers, materials made of pure silk firmly and evenly woven have this natural strength. Wool is famed for its warmth, but must be laundered carefully; linen made from pure flax has a reputation for wearing like iron but of not holding color well; cotton dyes easily and if the dye is "color permanent" keeps its color through many washings. Now rayon, though it can look like a material made of cotton, wool, or silk, has definite personality traits of its own.

It is not as elastic or as strong as silk. It loses some of its strength when wet, and if some rayon materials are stretched when wet, they do not regain their shape. Acetate rayon, because it is not highly absorbent, does not stain or soil easily, but it can be ruined if pressed with a hot iron, and it will dissolve if it comes in contact with cleaning fluids which contain acetone or chloroform.

For years, consumers unaware of these idiosyncrasies of rayon bought dresses made of it and treated them like other fabrics only to discover too late that they did not react the same way. Some merely grumbled among themselves; others returned their purchases to the stores and demanded compensation. In New York the members of the Federation of Women's Clubs decided to organize their complaint into an effective protest. In 1936 the women of this organization, whenever they purchased a fabric, requested that the store record the fiber content on the sales check. The checks were then collected and forwarded to the Federal Trade Commission.

There is little doubt that this and other concerted consumer drives for fiber identification were instrumental in establishing the trade practice rules for the rayon industry. In its December 1937 issue, one of the leading publications of the distributing trade says, "It has been stated that the Federal Trade Commission was induced to issue these rayon regulations by the petitions of 100,000 women . . . more than 2,000,000 women have appealed to the Government for these rulings."

This same publication predicts that frank labeling of rayon will be an asset to the rayon industry . . . "Because now that rayon is to stand on its own feet and be identified, intelligent manufacturers who use rayon will be more concerned about the quality of their rayon and will more and more be advertising the real merits of this man-made fiber."

Though the makers of rayon have had a spectacular success with their product in the brief span of 27 years since commercial production was begun in this country, the creation of rayon has a much longer history. For about three centuries, the idea that man might be able to make a fiber which, like cotton, wool, silk and flax, could be spun into cloth, drifted from one scientific brain to another. As early as 1664 an English scientist suggested that it could be done if we could learn from the silkworm how to spin a long continuous thread. Many attempts were made but it was not until the latter part of the 19th century that experiments in making synthetic fibers brought promise of practical results. Swan, of England, laid the foundation stones for the industry by inventing the nitrocellulose process for making lamp filaments and developing it for making textile yarns. In 1891 a French chemist, Count Hilaire de Chardonnet, after intensive research of his own via the nitrocellulose process, started to manufacture synthetic yarn. In 1899 his products, exhibited at the Paris exhibition, won the Grand Prix. To the casual observer the harsh glittering stuff was probably of little interest. If told that some day he would be wearing it next to his skin, that it would be made into suits and dresses, into straw for hats, that it would be draping his windows, upholstering his furniture, and that in another form it would be covering his loaf of bread, his half-pound of bacon, his package of cigarettes, he would probably have pooh poohed the idea.

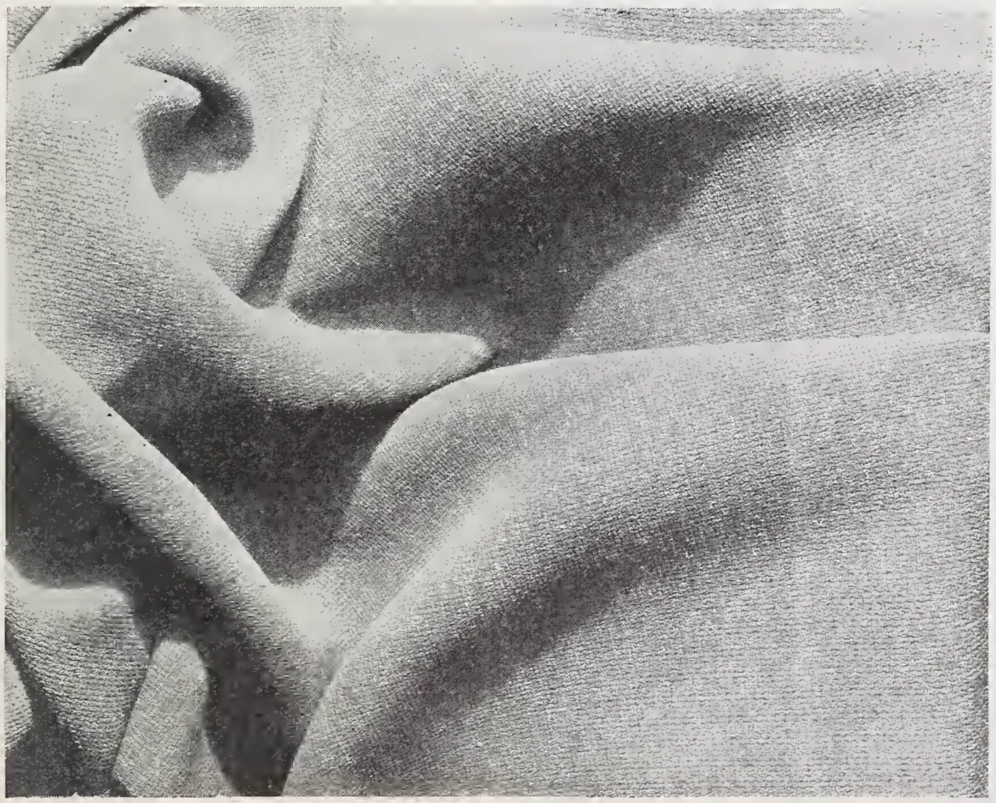
But what the casual observer did not know was that at the same time this fiber was being exhibited, the frontiers of cellulose chemistry were being pushed forward. Scientists were inventing new ways to make artificial fibers. Machinery to handle it for mass production was being perfected. By 1903 the four processes used for making rayon were invented—and Man had presented another gift to himself. We say man in general for we cannot credit the creation of rayon as we know it today to one man or even to a few men. It is the teamwork of scientists, inventors, capitalists and workers. Without the knowledge of cellulose chemistry, without funds to invest in equipment, without many new kinds of machines, without sharp eyes and quick hands to tend these machines, rayon could not be made.

Today 16 different firms in the United States manufacture rayon by the viscose, cuprammonium or acetate process. No rayon is made by the nitrocellulose process in this country at the present time. The total volume of rayon and staple fiber produced in the United States in 1936 was over 290 million pounds. To a rayon producer the words, "over-production," and "surplus stock" have little meaning. There seems to be an ever increasing market for their product. Throughout the depression when most manufacturers were curtailing production, rayon plants were expanding.

Today, rayon is the third most important textile fiber in terms of quantities produced. Of the 15,280 million pounds of cotton, wool, silk, and rayon produced in 1930, 82 percent was cotton, 14 percent wool, 3 percent rayon, and 1 percent silk. Of the 18,295 million pounds of these four textiles produced in 1936, 81 percent was cotton, 12 percent wool, 7 percent rayon, and less than 1 percent silk.

Significant, too, is the fact that while more and more rayon has been produced, more and more yarns of

In the viscose process, the coagulated thread passes through a spinning box to emerge as yarn looking like this and ready now to be reeled into skeins before washing, bleaching, and drying.



Rayon thread can be woven into practically any kind of fabric. Today, due to the new trade practice rules for the rayon industry, its presence in any material will be announced via the label.

the natural fibers have been produced, too. In 1930, the sum total of cotton, wool, silk, and rayon was 15,280 million pounds. In 1936, this figure had expanded to 18,295 million pounds.

Though rayon processes differ in the chemicals and procedures used in making a solution which can be coagulated into thread, the working principle in all processes goes back to the habits of the silkworm. It eats mulberry leaves, digests them and then through its spinneret—or spinning organ—it expels fine filaments which harden in the air. Making rayon involves taking pounds of cellulose and treating them chemically to turn them into a solution similar to the glandular secretion of the silkworm. This liquid is then forced through a nozzle analogous to the spinneret of the worm. As the liquid flows through the spinneret it is hardened in a chemical bath and twisted into thread.

When Chardonnet started his experiments in making synthetic fiber, he, like the silkworm, obtained his cellulose from the mulberry tree. Today rayon is made from cotton linters—the short ends of cotton which cling to the seeds after the cotton fibers have been removed—or from wood pulp. The cotton linters come to a rayon plant as baled loose pulp; wood pulp comes in the form of thick sheets like blotting paper.

To follow a sheet of cellulose through each process until it is a skein of yarn made by the viscose method would take about 12 days. During that time, you would be conscious of both clock and thermometer. A cotton producer looks to the sun to make his cotton grow, but a rayon producer depends on his time and heat regulators. A whole batch of rayon is easily ruined if someone forgets to check time or heat.

Until you reach the spinning room, there is little evidence that a

[Concluded on page 18]

WHAT IS SOAP?

Knowing what soap is made of, how and why it cleanses, is part of the equipment of the consumer who wants to get his money's worth for this essential

Two million bars of soap will come from this boiling cauldron of oils and alkalies. All types of soap-bars, flakes, liquids, have their beginning in a vat such as this one. At the kettle's bottom is soap's profitable by-product, glycerine.

Soap is as ancient as history itself. Nobody knows who was the first to make it. It is even possible that soap was discovered rather than invented. Only in more recent times has soap ceased to be a luxury and become a necessity for the average household. In about the fifteenth century, its manufacture was concentrated in what is now the great seaport of Marseilles—today one of the thriving soap centers of Europe. The English picked up the art from the French and the industry flourished in Britain beginning with the reign of Charles I, who granted a monopoly to a group of soap-boilers in London. A heavy excise duty was levied on its production until 1853 when the levy yielded 1,126,000 pounds in English money—an enormous sum for those days.

Versatile, soap serves man as a cleansing agent, as the base of many medicines, in textile manufacture, in a hundred other ways as far apart as the delicate perfumed soap wafer in the bath and the strong laundry soap used in the kitchen. It is international, reaching out to the furthest parts of the globe for its ingredients. A great industry has been built around it. Its estimated annual consumption in this country alone is 25 pounds per person. In price it is within the reach even of slim pocketbooks. In quality, it covers a wide range; yet few consumers know what it is, why it removes dirt, and how to get the most of it for the money they have to spend on soap.

An important customer of the American farmer and cattle raiser, the soap manufacturer spends each year many millions of dollars for tallow and other animal fats destined for soap products, but relatively little for cottonseed oil—at one time a leading ingredient of soap. Three decades ago, a good part of the cottonseed oil produced in the nation's southland went into soap. Today the cotton grower has found more profitable markets for this valuable by-product—particularly in the food industry. Also, in more recent years the chemist's laboratory has discovered other vegetable and plant oils which have almost completely displaced the use of cottonseed oil in soap.

Colonial America manufactured its soap in the home until the middle of the last century when it caught up with the industrial revolution. The soap kettle and the lye barrel were the standard equipment; the ingredients which went into the soap did not differ much from the basic ingredients used in the days of the Biblical prophets or in the great industry which exists in 1938.

It was left to 2 Frenchmen, working in the latter part of the 18th century, to discover methods of improving and refining the making of soap on which mass production of the materials is today based. Le Blanc discovered how to make soda (alkali) from common salt; and a few years later Chevreul determined the chemical makeup of fats and oils and what effect alkalies had upon them. Their work, says one great American soap authority, "took the making of soap out of the realm of guess work."

Today the soap industry in America is among our greatest. In 1935 it rated 45th of all industries in the United States in terms of the value of its products. There were 238 factories in operation doing over a third of a billion dollars business annually. Approximately 17,000 persons were employed in soap manufacture. Production, excluding shaving soap, liquid soap, soap powder, and scouring powder, totaled 2,458,000,000 pounds. A 3 cents per pound excise tax kept imports down to about 4,000,000 pounds in 1936; about 28,000,000 pounds left United States ports for foreign destinations.

Products of the industry vary from a thick, "greasy" mechanic's soap to toilet soap. In between are shaving soaps, shampoos, flakes and laundry soaps, and other outgrowths of one of the best and simplest cleansing agents known to man. Into their manufacture go coconut oil from India, Ceylon, the Philippines and the South Sea Islands; palm and palm kernel oil from Africa and Sumatra; soybean oil from the United States and Manchuria; olive oil from Italy and Spain; cottonseed oil from our own South, from Egypt and the Sudan, and other vegetable oils from various sources; tallow and other animal fats from cattle roaming the ranges of North and South America and Australia. Chemists are continually experimenting in laboratories seeking new combinations of fats, oils, and the standard alkalies to develop new types of soap.

The scientist defines soap as the "metallic salt of a fatty acid"—meaningless words to the layman. Simpler is the definition "a substance resulting from the reaction of alkalies on animal or vegetable fats." Basically, that is all that any soap is. Difference in price comes with difference in the quality and quantity of the fats and alkalies used, other embellishing ingredients, and methods of manufacture and sale. Consumers whose purses are limited need only be certain that the soap they purchase for personal use or for use on delicate fabrics be pure and mild. Likewise, their best guide to purchasing soap for heavier work is that it meet the demands of the laundry or of hard scrubbing without being so strong as to injure the skin or the material the soap is used on.

Grocery shelves or the druggist's counter are accurate indices of the soap maker's ingenuity in designing various types of soaps for certain purposes. A soap may be hard or soft, liquid or a cream, flaky or an abrasive powder. The modern soapmaker is always at work seeking new varieties. But he must always start with the same 2 basic ingredients: a fat and an alkali. Additional ingredients added to these can increase the soap's ability to clean or to make abundant suds. Other materials are sometimes added to combat water hardness, or to give the soap a pleasant scent, or to lend to it any specific property which might be desired by the manufacturer.

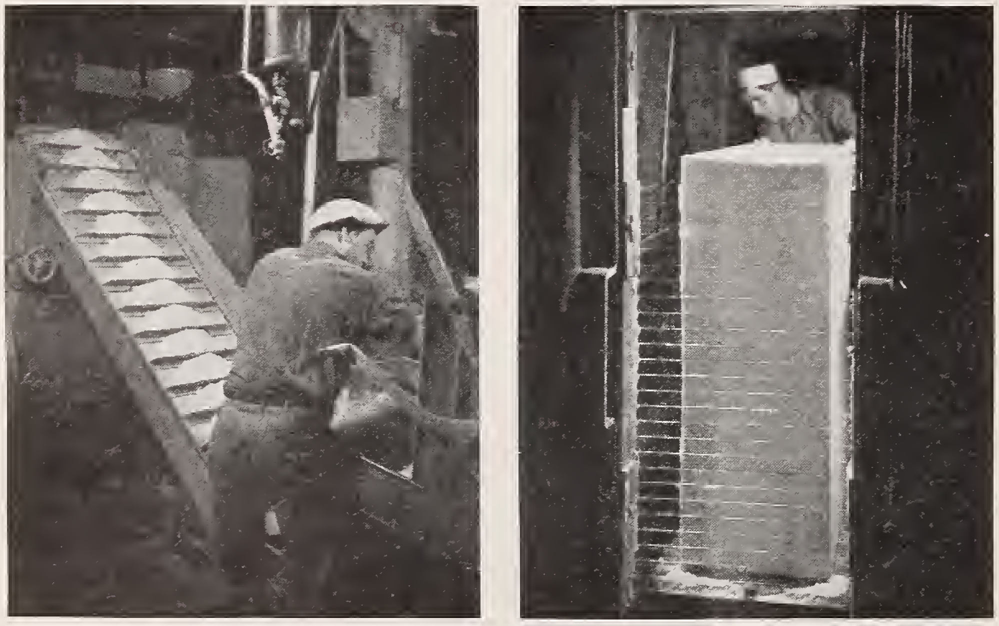
Conflicting schools of opinion exist on what causes soap to clean. Few chemists will state categorically what it is in the combination of a fat and an alkali that removes ordinary dirt from the skin, clothing, or other surfaces to which it clings. A generally accepted theory is that soap does the impossible; it makes water *"wetter"* than it is in its natural state. The scientist in the laboratory says that when soap is dissolved in water, the water has a *low surface tension*. He means that soap and water do not so readily form into drops as do plain water and other liquids. Wash a dirty hand with plain water, and you will have little success. The water appears to run off the hand without getting *under* the dirt. But add soap, and the water seems to cling to the skin. And in doing that it gets between the skin and the dirt and adsorbs the dirt within the thin film formed by the solution of the soap in the water. Then, when the hand is rinsed, both the soap and dirt are carried away. Some scientists challenge this theory. They say it is inadequate and claim that chemical action of the soap itself causes the dirt to break away and be washed away in the water. Probably the answer lies in a combination of these theories. So far the best equipped laboratory and the most powerful microscope have been unable to learn definitely the secret of this boon to civilization.

Manufacture of soap today is a story of steaming vats, great mixers, and huge molds in which the hot liquid soap is allowed to harden. A million pounds of soap may be made in a single "cooking." They are dried in great slabs and then cut up into the convenient sizes which the consumer buys over the counter.

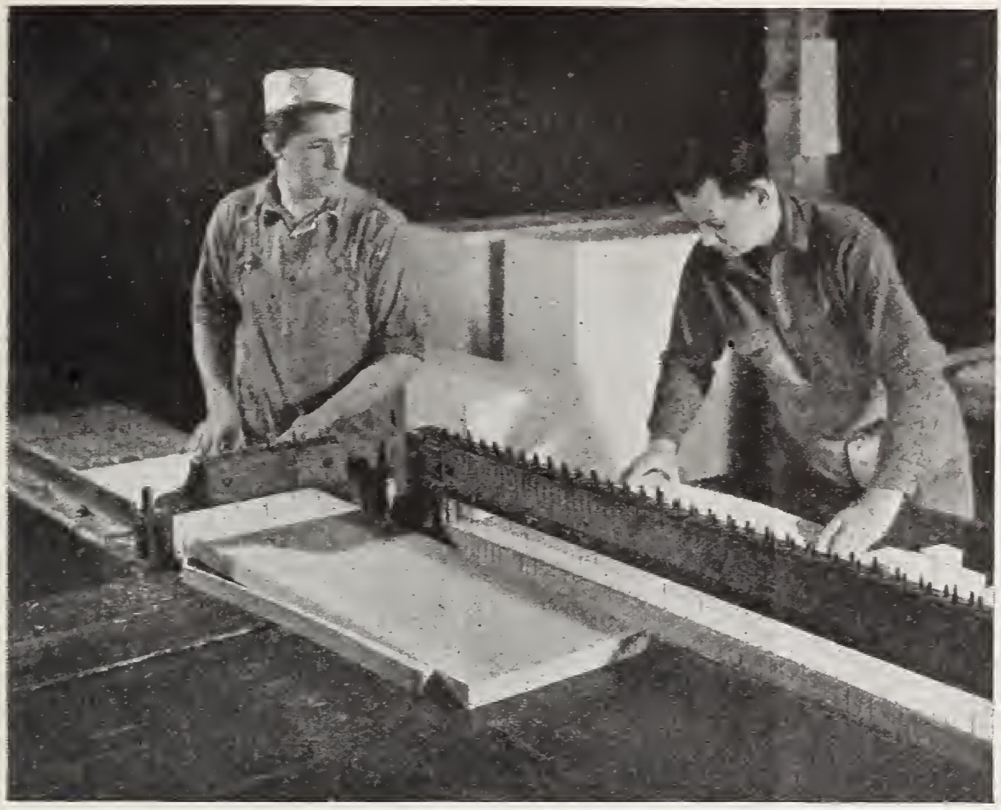
Soapmakers who start their manufacturing process by using the best and the purest oils and fats get a head start in producing good soaps. Alert consumers want to know what raw materials go into their products and how good they are. There is little choice in good alkalies. Hard soaps are usually made with soda, while soaps made with potash are softer and dissolve easier in water. The fats also influence the hardness, solubility, appearance and other properties of the soaps. Hard fats such as tallows and certain other animal fats make very hard soaps. Therefore, rosin combined with alkali is often added to these soaps to soften them. Coconut oil and palm-kernel oil are favored by the soap manufacturer both in laundry and toilet soaps because they make hard soaps which at the same time dissolve easily and lather freely. A mixture of these oils with other fats is usually used. A straight palm oil produces a crumbly soap. Olive oil soap is also outstanding because it is mild and free lathering in warm water. It is often mixed with tallow and coconut oil soaps for use in milled toilet soaps. Other oils, such as cottonseed oil, corn oil, soybean oil, linseed oil, etc., all impart certain characteristics to soaps made from them.

Best toilet soaps are made from the purest, whitest, and least odorous fats and oils. If they lather freely—that is, if they are made of a mixture of coconut oil and tallow, palm oil, hardened fats, or olive oil—they rate high when they are properly made.

All soaps contain water to make them dissolve more easily. Here tons of water are being poured into a soap kettle and mixed with the fats and alkalies from which will come soap. When the Government buys, it sets a maximum water content for soap.



Two steps in the story of soap making are told above. At the left perfume is being added to powdered soap on the way to the milling machine where it will be molded into bars. At the right, taut piano wires slice the molded cake of soap into slabs.



Again piano strings are used to cut the slabs of soap into the small bars which the consumer ultimately buys. The worker at the left cuts the slabs into long bars; his companion on the right slices them crosswise into the laundry or toilet cake size.

Best laundry soaps are usually made with a mixture of tallow together with some vegetable oil or rosin and often with certain "builders." Also, in some of them are alkaline, and other "builders."

A poorly made soap is one in which there has not been a complete combination of the fats and alkalies, or from which excess fats or alkalies have not been eliminated. Too much alkali in a soap—even a strong laundry soap—can prove definitely injurious to the hands. Excess fat makes the soap greasy, soft, rancid, and inefficient as a cleanser.

Soap making is roughly divided into two basic stages: (1) boiling fats or oils (liquid fats) or combinations of them, with alkalies to produce the actual soap. This, the professional soap maker calls saponification. And (2) finishing the soap by certain mixing, milling, or grinding processes to yield a soap suitable for the purposes for which it is designed. At this time also, naphtha, perfumes, and other ingredients may be added.

No minor by-product of the first stage of soap making is glycerine. Considered a nuisance by the soap manufacturer at one time, it is used for a number of purposes, both in industry and in the home. It plays a big part in the munitions industry in the making of dynamite and explosive gelatine. The soap industry itself sometimes returns the refined product to toilet soaps. In the home, glycerine is used for medicinal purposes and finds high favor as a skin softener.

Second stage of soap making is the "mixer." Hot liquid soap goes into the "mixer" after the impurities and excessive alkalies have been drawn off and the needed amount of water added. In the mixer are added chemicals, disinfectants, perfumes, "builders" to soften the water or to increase the cleansing power of the soap, abrasives for scouring soaps, dyes or other coloring matter, air for floating soaps—in fact all the extras demanded by the soap maker's formula. It is here that soap gets its final character and personality. Of course, the combination of fats and alkalies before this stage goes a long way in determining what the final appearance and makeup of the soap will be. No single soap can meet all the demands of the home and family. From this fact springs the need for the "mixer"—or, in professional soap-maker's parlance, the "crutcher."

A "builder" can be a water softener—such as sodium silicate—or can be a chemical added to prevent rancidity in soap. Borax acts as a water softener, while rosin is often present in bar laundry soap to increase its lathering power and to give it a tough waxy character. Coconut oil and palm kernel oil give lathering power to white laundry soaps and frequently are used to replace rosin in soaps designed for use in the kitchen or on delicate fabrics.

Oftentimes, in cheaper soaps, sodium sulphate, chalk, starch, and other substances are added as adulterants and fillers. These are merely intended to displace soap content, to increase the weight and size of the bar. In most cases, they do not add to the value of soap; they do not clean; they are not builders; they are merely hitch-hikers grabbing a ride at the consumers' expense.

After the soap has been put through the mixer, it is usually poured into huge frames to cool and harden—a process taking anywhere from 3 to 7 days. Then, unless the soap is to be milled, chipped, flaked, made into a powder, a cream, or dissolved to make a liquid soap, it is cut by a "slabber" into desired sizes, stamped, packed, and sent on its way to the consumer.

Price is not always an indicator of

the cleansing power of a bar of soap. In order to compare values in different soaps intended for the same use the consumer should know: (1) how much the soap weighs; (2) what proportion of excess alkalies or excess fats are contained in the soap; (3) what "builders" or "extras" it contains, their purpose, and what part of the soap they comprise; (4) how much water is in the soap (a certain amount of water is necessary in every soap); (5) if it is a floating soap, how much air is in it in relation to the size and weight of the bar; and (6) the best use to which the soap can be put. Few soap labels tell these things now. They are facts for consumers to aim at getting.

Now for a few hints on what to look for in particular kinds of soap. Milled soaps are usually made by drying the hot liquid soaps in ribbons, making them into a powder, adding perfumes and other materials, and then, under great pressure, squeezing the broken powder into bars and cutting them into cakes. This is called the milling process. Toilet soaps made by hardening the liquid soap into bars is said to be "framed." A toilet soap should be mild, free of excess fats and alkalies which might cause serious injury to the skin of the user. Floating toilet soaps purchased by the Government cannot contain more than one-tenth of one percent of free alkali while milled toilet soaps cannot contain more than one-tenth of one percent of free alkali. Free uncombined fats are usually limited to 2 percent, although sometimes it is desirable to have a larger amount in some toilet soaps. If properly protected against becoming rancid, such soaps can be more free-lathering.

Put a toilet soap to the tip of the tongue. A neutral one will not bite or burn, indicating it is free of alkali and is safe for skin and fine fabrics alike. If it is free of excess fats it will not feel greasy to the hands and, unless perfumed or medicated, will be practically odorless. If you choose a perfumed soap, buy one that retains its aroma during all the time that you use it; often a perfumed soap loses its odor after it has been used 2 or 3 times. Buy a toilet soap which is free of builders, such as sodium silicate and sodium carbonate. Learn if the soap is milled or molded. If milled, it should have not over a 15 percent water content; if molded, about twice as much. Compare the weight of a floating soap with one not so made. Floating soaps contain a large amount of air in the form of thousands of tiny bubbles. Usually they dissolve more rapidly, but sometimes they make better suds than ordinary soaps.

Purchase a laundry soap according to the purpose for which you want it. (See CONSUMERS' GUIDE, March 14, 1938.) If you want it for scouring and for heavy washing, then—if you are following Government standards—buy a strong soap with a maximum of five-tenths percent of excess alkali content and no more than 25 percent rosin. The proper addition of rosin increases the cleansing properties and lather of some soaps. Too much rosin makes the soap sticky and hardens fabrics washed with it. The soap should also contain 8 to 10 percent of "alkaline builders." Some prefer to add water softeners and other "builders" to the water separately rather than buying them as part of the bar, thus displacing the amount of pure soap. A yellow laundry soap often contains more true soap and less water than a white laundry soap. A white soap with more alkaline builder (to increase cleansing power) and coconut oil (to aid lathering) contains about 40 percent water. Allowing laundry—and other—soaps to dry before using will make them harder and reduce waste

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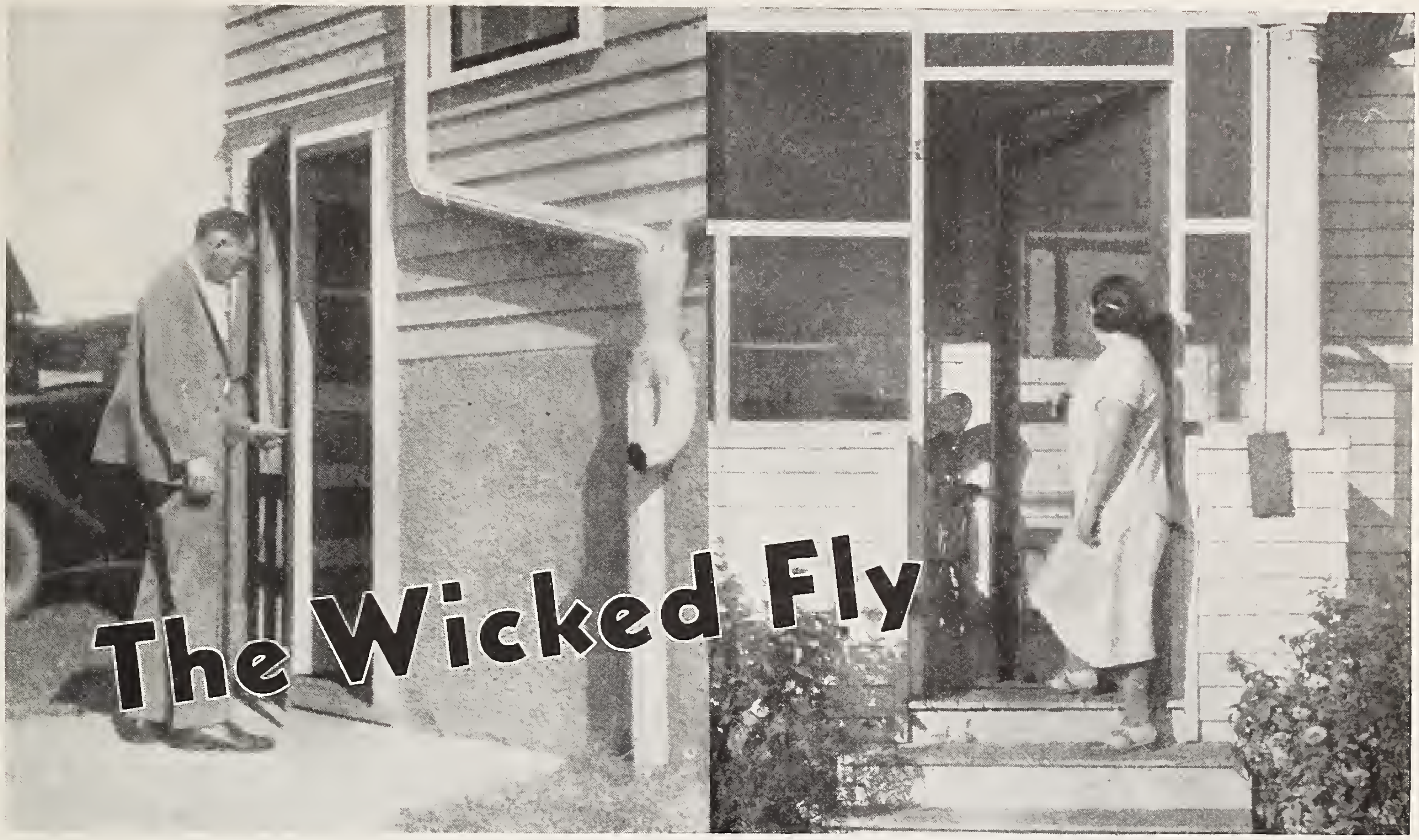
This man's job is to blend rare fragrances into new perfumes before they are mixed into expensive toilet soaps. He works with scents that are almost priceless.

The Wicked Fly



(1) The correct way to hang a screen door is to have it open out. (2) A screen door that opens in makes it easier for flies to enter the house.

—careful householders pursue it! Here are some FACTS about the behavior of the fly and how to get the better of it before summer weather increases the health hazards from this common pest

WELCOME the first fly that lights on your cuff in early spring. It's a timely reminder of the pesky generations to come unless you and your community do something about ferreting out and eliminating their breeding places.

If you wait too long to do the job, it's of little avail in torrid midsummer to organize the family into a swatting brigade. You can kill flies by the hundreds on one day, only to find that the next there are battalions more to fight. The only really effective way to free your home of flies is to cooperate in eradicating from the locality in which you live the refuse on which these dangerous insects breed.

Flies thrive on filth. Any decaying vegetable and animal matter will do. In its search for food the adult fly is invariably attracted to the house. Its keen sense of smell directs it to any exposed food. It is a diligent feeder. Between its forays to kitchen and dining room, it often goes back to the garbage heap. The hairs and bristles on its three pairs of legs are admirably suited to carrying disease germs, the eggs of various parasites, and organic waste. It may ease itself of this infinitesimal but dangerous burden as it crawls over food or as it rests for a moment on a person's face. This is not a pretty picture, but it's a true one.

There is laboratory proof that over 30 different disease organisms and parasitic worms can be carried by these insects, and there is strong circumstantial evidence that they carry more than these. They are notorious carriers of the varieties of bacteria responsible for summer diarrhea, to which children are especially susceptible. Time and time again health history has shown that where an epidemic of summer diarrhea is raging, flies are breeding and feasting.

Some protective measures which any family can take to safeguard its food supply and home from flies are discussed in the following pages. But better than all defensive measures is an offensive attack in the early

spring on the favorite breeding places of the enemy. If a community attacks the fly problem in the early spring, by seriously and thoroughly setting above to eradicate fly breeding places, it has gone a long way to insuring itself a more comfortable and healthy summer. A female fly during her lifetime lays from 2 to 4 batches of eggs in lots of about 120 or more. If conditions are favorable, one fly in early spring may be responsible for 10 or 12 generations of flies during the season.

A general cleanup campaign of all accumulations of refuse and rubbish is essential, and this campaign must be followed by constant vigilance over the cleanliness of house, barn, yard, alley and street. To eradicate flies from a community effectively and thoroughly, a health department must have funds to operate and must have the cooperation of all residents. Two important steps towards fly elimination are taken when garbage is speedily and efficiently disposed of and the regulations on the care of stables and receptacles for manure are enforced.

Many different species of flies, if given a chance, may invade the house. The most common is the housefly—a non-biting six legged insect with four black stripes down its back and a sharp elbow in one of the veins of the wing.

From the barn comes the stable fly. This one is a bloodsucking insect. It can bite and does. If it happens to be harboring dangerous disease germs, it can directly innoculate a person or animal with them. This fly is gray in color, somewhat fatter than the housefly.

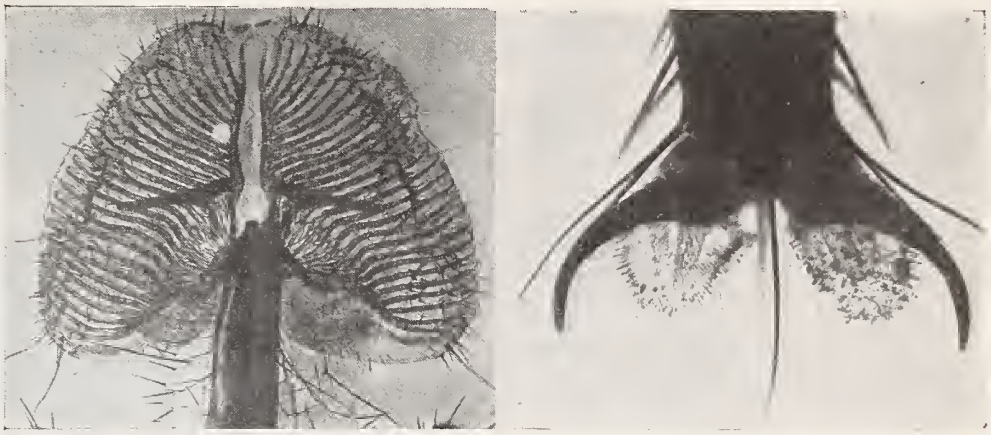
Bluebottle flies, black blowflies, and greenbottle flies, which breed on decaying animal matter, fly into the house if given a chance. The bluebottle and blowfly have an especial liking for fresh meats and fruits.

One of the first flies one finds in the house in the early spring is the cluster fly, so-named because of its habit of massing in groups in warm corners on cold days. It is slightly larger than the housefly and has a covering of fine yellowish hairs. Another early spring visitor is the lesser housefly. It has a smaller, paler, and more pointed body than the common housefly. Its breeding habits are the same as those of the housefly, but it is not such an assiduous feeder and seldom alights.

Life cycles of flies vary with different species. The true housefly, which is the pest of man the world over, goes through three stages—the egg, the maggot period, and the pupa or resting stage—before it reaches maturity. From egg to adult, particularly in midsummer when conditions are favorable, may take only from 8 to 10 days. If the temperature is favorable, the eggs may hatch and the white cylindrical larvae or maggots may emerge in 12 hours. As the maggots mature, they grow restless and migrate to the edges of the manure pile or to loose materials under the edges of stones, boards, etc. The migration of the maggots is an important thing to remember in a cleanup campaign. One must ferret out their hiding places, which may be several feet away from the manure pile.

Flies may remain in the larval stage from 4 days to 4 or 5 months, depending on moisture, temperature, and food supply. The pupal stage may likewise stretch into months. It is in these two stages that millions of flies pass the winter. As soon as the warm weather sets in, they break through the sacs encasing them, emerge from soil or manure pile, crawl around until their wings ex-

When hunting flies with the aid of an atomizer, shoot the spray ceilingwards and aim directly at the flies. The pests are not killed unless they come in direct contact with the spray.



(1) With its tongue, greatly magnified here, the housefly sucks but does not sting. (2) The foot of the fly, also magnified, shows the sticky pads which are well adapted to carrying and scattering contaminated material.

pand, bodies harden and they are ready for flight. In midsummer, pupation takes only from 3 to 6 days, and in 2½ to 20 days the female will be ready to deposit the eggs for a new generation.

Recapturing flies in traps 13 miles from where they were liberated has been done, but ordinarily if food is available near their breeding place, they will stay close to it. The vision of a fly's compound eyes, which really consist of a thousand or more simple eyes, is wide but is not particularly acute. The fly has, however, a highly developed sense of smell which leads it straight to the kitchen. It also likes the warmth of a house, especially in cold weather.

No definite proof has developed that mature flies live over the winter to propagate in the early spring. In laboratory experiments, adult flies have not lived more than three months. They die quickly in the cold. If a house is infested with flies throughout the winter, chances are there is a good breeding place within the house where the females may deposit eggs.

Screening all doors and windows is the first preventive measure to keep flies out of the house. If the expense of screening every window is too great, those on the first floor, especially those of the kitchen and dining room should be protected first. Screens should fit tightly and the meshes of the screen should be small. About 16 meshes to the inch is a good choice. Screens made of copper are more expensive than those of painted or galvanized wire, but copper ones last longer and may be more economical in the end, especially in humid climates. To increase their wear, painted screens should be repainted each season. But even with the finest and tightest of screens, flies will wing their way into a home. Food should always be screened or protected in some way. The same sanitary measures the housewife takes at home to shield her food supply from these germ carriers should be taken by every market and grocery store.

Fly traps, if properly constructed, well-placed, and well-baited, are effective means of catching flies. Bait pans should be well filled with a saccharine feast. A fermented mixture of one pint of backstrap molasses to 3 pints of water brings good results. Flies also have a liking for mashed over-ripe bananas and milk. Full directions for the making and caring for traps are given in the Government publication—"Flytraps and Their Operation"—available for 5 cents from the Superintendent of Documents, Washington, D. C.

Flies which still gain access to the house in spite of traps and screens can be poisoned in wholesale lots with a concoction made at home by mixing three teaspoonfuls of commercial formalin with a pint of milk or water, sweetened with a little brown sugar. This can be placed in saucers around the room after all other liquids are removed. A speedy way to attract flies to the drink is to darken the room except for the one window on which the saucer of liquid is placed. Here's another plot for ensnaring flies: Place a piece of bread soaked in a formalin milk solution on a saucer, in a tempting spot. Besides these homemade poisons one can also buy insect poisons. Some of these commercial poisons, however, contain arsenic, making their use rather dangerous, particularly if there are children in the family.

Spraying the house on summer days is becoming an indoor sport. Before spraying, all the doors and windows should be closed and should remain closed for 5 or 10 minutes while the room is filled with a fine mist of the insecticide. Later the fallen insects should be swept up and destroyed. Flies are not killed by the spray unless they are actually hit by it. Many fly sprays on the market are extracts of pyrethrum in a carrier of mineral oil similar to kerosene, and contain perfume. Sprays deteriorate if stored for some time in glass bottles exposed to the sunlight.

Spray preparation can be made at home by soaking 1½ pounds of pyrethrum flowers in a gallon of kerosene for 2 days, then straining off the liquid. Care should be taken not to use any spray containing kerosene near flames.

Householders serious about attacking this fly problem will find helpful, "The Housefly and How to Suppress It," available for 5 cents from the Superintendent of Documents, Washington. D. C.

STRAWBERRY NEWS

Market reporters hoist the flag marking a bigger and better strawberry season

STRAWBERRIES are moving north now in their ice-cooled cars. Strawberry tide may begin as early as December, when first shipments start trickling to market from Florida. It gains momentum from this area in January and February. Berry patches in Louisiana, Texas, and Alabama swell the tide. Louisiana is the big shipping State in April, followed by berries flowing from Mississippi, North and South Carolina, Arkansas, Tennessee, and Virginia. In May and June the middle States send their red wares to market. Finally in July and August the strawberry crest passes through the northern States of Massachusetts, Michigan, Oregon, and Washington, and the strawberry tide disappears as suddenly as it surged up out of the South.

Blight, cold weather, frosts, late springs, sometimes thin the tide until it is a narrow trickle reaching consumers. This year a December frost killed enough early plants in Florida to delay the first appearance of the berries on the market. Despite this, strawberries will be plentiful because of larger crops in the later producing States. Total acreage is higher this year than it has been since 1934. Altogether, 185 thousand acres are covered with strawberry runners this year, 13 percent more than last year. And from Louisiana reporters flash the news that growing conditions have been ideal, and production perhaps will be 22 percent more than last year.

Frost may be a blight or a boon, depending on when it occurs. Utilized to preserve strawberries, it is gradually becoming an icy road to salvation for strawberry growers. Ripe berries, which have gone unsold or which might have spoiled, are sometimes frozen. For ice cream, preserves, pies, and for consumers with a taste for strawberries from August to January when they are out of season, frozen strawberries have ceased to be something to wonder at and have become an everyday commercial event. In the year 1937 approximately 40 million pounds of strawberries were frozen.

Louisiana stars as the first strawberry State because out of every 100 quarts coming by carlot shipment to market it supplies more than any other State. In an average year it markets 12 out of every 100 quarts. Arkansas usually provides 8 out of every 100 quarts; Oregon and Texas each 7 out of every 100. Fifth place goes to Missouri supplying 6 out of every 100 quarts.

So skillful are strawberry breeders that they have been able to develop strawberries to tease any palate, to fit almost any strawberry purpose, and to flourish almost anywhere. Of the 30 varieties of strawberries grown in the United States, the Klondike and the Blakemore are most widely grown in the South, the Aroma in the Central States, and the Howard 17 in the States farthest north. The Klondike, best known to consumers, for it makes up most of the strawberry tide that floods north from Louisiana, has a deep red color and firm crimson flesh. It is perhaps a little more tart than other berries. Because of its full flavor, ice cream manufacturers prefer it for their strawberry ice cream. Smaller, pinker, more likely to be flecked with yellow seeds, the Blakemore is less acid to the taste, and because it is easily capped it is popular for preserving. The Aroma, a large round crimson berry with a delicate flesh, is popular as a dessert. The Howard 17, the berry with the name that sounds vaguely as if it should be the name of an automobile, is a less round, long berry, red fleshed inside and out, less acid than the berries that come from the South and a favorite in the North for its very long season.

For preserves, strawberries should be easy to cap, medium sized, and have a tart flavor. They also should have a bright red color that does not darken after preserving. For ice cream, too, these qualities make for a rich smooth strawberry ice cream. The Klondike is excellent for both of these purposes as is the Marshall, a large, deep crimson, conical-shaped berry which appears about the middle of the strawberry season in the Middle-Atlantic and New England regions, but which is grown most extensively in Oregon for commercial preserving.

Relished for their flavor, strawberries lose nothing from being also an excellent source of Vitamin C, the food nutrient that helps to insure against that too-tired, lack of pep, feeling and too many visits to the dentist. A four-ounce serving of strawberries, for example, is about as full of Vitamin C as a half glass of orange juice, and a safe quota for the average person each day. Ninety percent water, strawberries contain practically no other important food elements except moderate amounts of calcium and iron.

Strawberry dollars may not be so seriously considered by consumers as other food dollars, but they are of prime importance to many strawberry planters. An examination of the Chicago consumer's strawberry dollar in 1934 showed that 20 cents went to the wholesale and retail dealers, 20 cents went to transportation and refrigeration, 7 cents to the marketing charges at the shipping point, and the remaining 53 cents went to the growers themselves. Growers do not always fare as well as this. These berries, like most others, are so highly perishable that if they are not sold one day, they may be unsalable the next day, depending largely on the weather. Sudden carloads of berries descending on a city market for quick sale have a sudden drastic effect on prices; their appearance may send berry prices to consumers catapulting down, upsetting prices back in berry counties. As a result of this, berry prices from day to day are frequently irregular. Louisiana farmers are attempting to regulate the flow of berries to market so as to avoid disastrous gluts. They plan to ship only U. S. No. 1 grade berries this year.

Interstate marketing of strawberries must be done in containers the sizes of which are fixed by the Standard Container Act of 1928. Before standardization was achieved, there were as many as 44 different sizes of berry boxes on the market. Now there are 3 sizes: one-half pint, pint, and quart. Whether the household buyer gets full measure in such boxes depends not alone on the honesty of merchants and the vigilance of local Weights and Measures officials, but also on consumer insistence upon properly filled berry baskets.

Quality grades, defined by the U. S. Bureau of Agricultural Economics, are necessarily more useful to growers and big buyers than to household consumers. Again, the reason is the perishable nature of the fruit. Louisiana makes grading by these Federal standards compulsory for all strawberries shipped out of the State. Many of those sold by Florida, Tennessee, and other States, too, are graded. But the final consumer never sees the grade on the box he buys. The careful family buyer will look for strawberries that are fresh, clean, and bright, have a solid red color and are set in a green clasped cap. Good buys are free of moisture, dirt, and trash. Small misshapen berries, the runt nubbins, usually have a poor flavor and sometimes are underripe. Size, however, is less important than color, though most consumers prefer large berries. Berries without caps are likely to leak their juices and to be wasty. Whiskers, a kind of mold, develop rapidly on capless and overripe berries.

When the juices have burst through the skins, the berries are well avoided. A container deeply dyed with strawberry stain is also a "don't buy" sign. White spots on the berries are a sign of inmaturity. Decay, easily seen in mold, may not necessarily occur on the top of the box of berries. To make sure, examine berries from down in the box.

RAYON COMES OF AGE

[Concluded from page 7]

rayon factory with its enormous drums and maze of pipes is the home of a textile fiber. In machine number one in a viscose plant, the cellulose sheets are steeped in caustic soda. Later the excess liquid is pressed out of them and they are broken up into crumb. The crumb, after being aged for a few days, is thoroughly mixed with carbon disulphide. In the process, the crumb changes to cellulose xanthate, an orange colored substance soluble in water. Another caustic soda bath changes the xanthate into a glutinous solution about the color and consistency of honey. This is the viscose solution which, when solidified, can be spun into yarn. But before being piped to the spinning room it must first be aged and filtered and refiltered to free it from every particle of foreign matter that might clog the hole of a spinneret.

For many years, the size of a hole stymied the progress of rayon. In order to produce fine filaments, spinnerets had to be made with orifices infinitesimal in size and accurate to the ten-thousandth of an inch. And they had to stay that way while miles and miles of liquid traveled through them. Rayon manufacturers have found precious metal the most durable and satisfactory material for spinnerets. Many of them are made of an alloy of platinum and gold. Some have holes so tiny that they are barely visible to the naked eye. Others have only one round hole. The single solid filament that streams through these spinnerets is used for artificial straw.

Transparent paper is made the same way as rayon yarn up to the time the viscous solution is ready to stream through the spinnerets. Then the liquid comes through a slit in a long continuous sheet and from that point on it is treated with different chemicals than those used in making yarns.

Filaments to be used in making yarns are given an acid bath to harden them as soon as they come from the spinneret. This chemical immersion also changes them from their caustic state into regenerated cellulose. Then these long strands of cellulose are ready to be washed, bleached, dried and twisted into rayon yarn, or to be cut up into the short length rayon staple fiber.

This rayon staple fiber may be shipped in bales to cotton and wool factories to be combined with one of these fibers and spun into a mixed yarn or it may be spun alone. Many of the new "wool" fabrics are the result of the recent development and improvement in spun rayon.

The method by which cuprammonium yarns are made follows the same general outline as that for viscose yarns, though different chemicals are used in the process, and the handling of the filaments as they come from the spinneret is different. Cotton linters which are the basic raw material are first purified in a caustic soda solution and then are dissolved in what is known as the cuprammonium solution, a chemical combination of copper and ammonia.

Cotton linters are used as the base for acetate yarns, but the finished product is not pure cellulose but a chemical compound. The compound is formed in the first stage of manufacturing. Cleaned and bleached cotton linters are mixed with acetic anhydride, to which a catalytic agent, usually sulphuric acid, is added. The compound is dissolved in acetone, purified and then fed to the spinning machine.

Yarns produced by each of these processes have slightly different characteristics. Viscose yarns are known to have a higher strength when dry but to be weaker when wet than the other types. The cuprammonium yarns rank first in strength when wet. Acetate yarns rank second in strength when dry and are the weakest of the three when wet. And again heat may cause the fibers of an acetate material to melt away, and acetone, an ingredient used in some cleaning fluids, may dissolve them.

To get the best possible service out of a rayon fabric it is important to know whether the fiber has been made by the acetate or cuprammonium or viscose method. This information is not always given on the label. The burning test is the simplest amateur way to differentiate between acetate rayons and those made by other processes. Viscose and cuprammonium rayons flare up and burn quickly to ashes, leaving an odor like burning cotton. Acetate seems to fuse and melt rather than to burst into flames. The material made from acetate yarns is apt to pucker and curl and there will be a residue of small black balls along the edge of the material similar to those left on a partially burned piece of silk. The odor of a burning acetate fabric is quite pungent.

All rayons require careful handling when laundered as the fibers are weaker when wet. If submitted to strain they may break, or stretch, and the garment may not regain its natural shape when dry. Rayon fabrics should not be wrung, twisted, or scrubbed. They should not be soaked for too long a time. The best technique is to use lukewarm water with a generous supply of suds made from a neutral soap and to squeeze the suds through the fabric. Then rinse thoroughly and after gently squeezing out most of the water, roll the material in a turkish towel and knead out the rest of the moisture. It is best for rayon garments to be laid flat to dry—especially if they are knitted goods. When fastened to line, a pin may cut the yarn, and the material may also stretch. Rayon should be pressed on the wrong side and never with a hot iron.

WHAT IS SOAP?

[Concluded from page 12]

if you find they are extremely soft when purchased.

Buy flakes and beads by weight, not by the size of the box they come in. Though these give the consumer less soap per dollar than most other soap products, the convenience of their form may justify the added expense. They are generally purer than many other laundry soaps, and therefore are better suited for delicate fabrics. If used on delicate fabrics, they should be mild, and should, according to the standards on which the Government buys them, contain not over 10 percent water, and no more than two-tenths of one percent of free alkali. Those for fine silks, woolens, and rayons should be used with lukewarm water. Generally, flakes and beads are best for delicate fabrics when made with a good amount of coconut oil. Soap chips and powders, for dishwashing and general textile use, usually contain less pure soap and more builders than flakes and beads. Stronger, their basic oils come from tallow and other animal fats. Like flakes, chips are usually made by drying the liquid soap on hot rollers. Beads are made by spraying the liquid soap through a huge nozzle which causes it to dry in the shape of beads.

Soap powders should be entirely soluble in water. A good soap powder is made of a uniform mixture of soap and sodium carbonate or other builders in powdered form. It is used primarily for cleaning glass, enamel, and other smooth surfaces. It should be free of any material which will scratch or injure the surface. A simple test is to rub the powder on a smooth plate glass with an ordinary 5-cent piece. A good powder will not scratch the glass.

Scouring powders are for the rougher work, such as cleaning pots and pans. They usually contain abrasives such as powdered pumice, volcanic ash, quartz, marble, or feldspar. They should be free of useless "filler" materials.

Scouring cake soaps are usually a combination of these two powders made into a firm cake. Their big advantage is that they lather better since they contain more actual soap than the powders.

Transparent soaps—no longer in vogue—are usually less pure than opaque brands. They contain alcohol, glycerol, or sugar, and sometimes rosin. Says the National Bureau of Standards about them: "Transparency was considered an indication of freedom from impurities, but is actually no indication whatever of purity or quality."

Buy liquid soaps if you want them for some special purpose, not because you feel they will last longer and be easier on the skin. They are water solutions of a neutral vegetable oil soap and rarely contain more than 20 percent true soap. Also in them is generally about 3 percent of glycerine which has an emolient value and prevents excessive foaming in the container. Government standards state they should contain not more than five-hundredths of one percent of free alkali. They are adapted for shampoos and similar preparations.

A pure olive oil castile soap is admittedly one of the mildest and purest soaps on the market. Castile soap is ordinarily thought of as a soap made entirely of olive oil and an alkali. But the Bureau of Standards, in discussing castile soap, has this to say on the subject: "The name now represents a type of soap, the term 'castile' being applied to a soap intended for toilet or household use. . . . There are soaps made entirely from coconut oil which are sold as coconut castiles. Many other castiles are made from a mixture of coconut oil and tallow." An attempt by the Federal Trade Commission to force soap manufacturers to adhere to the former United States Pharmacopœia standards for castile soap was overruled by a United States Court of Appeals a few years ago. The U. S. P. at one time defined castile soap as one made entirely of olive oil and an alkali. If you want a soap made only of olive oil, read the label carefully.

Ordinary medicated and antiseptic soaps—though harmless for the most part—are rarely credited by dermatologists with possessing any curative properties. Of course, there are some antiseptic soaps made especially for hospitals and sick room which meet medical standards. But these are prepared for doctors and are seldom sold over the counter.

Most physicians maintain that for the skin soaps which wash away dirt and germs are mild antiseptics. Many germicides are injurious to the skin, and can rarely be concentrated safely in great enough quantities in soap to be of any use. "Beauty" soaps, according to experts, also can do nothing more than clean and leave the skin fresh and soft. The idea that vitamins can be absorbed through the skin by "specially treated" soaps has been questioned by vitamin authorities. The Chief of the Food and Drug Administration's Vitamin Division, pointing out that the skin does not absorb nourishment for the whole body, says: "The amounts of Vitamin D which could be rubbed or washed in through the skin to remedy a diagnosed deficiency would, according to available data, not be significant."

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